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AN EXPERIMENTAL EVALUATION OF AUDIO-VISUAL METHODS--CHANGING ATTITUDES TOWARD EDUCATION.

BY- LOWELL, EDGAR L. AND OTHERS
JOHN TRACY CLINIC, LOS ANGELES, CALIF.

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AUDIOVISUAL PROGRAMS FOR PARENTS OF DEAF CHILDREN WERE DEVELOPED AND EVALUATED. EIGHTEEN SOUND FILMS AND ACCOMPANYING RECORDS PRESENTED INFORMATION ON HEARING, LIPREADING AND SPEECH, AND ATTEMPTED TO CHANGE PARENTAL ATTITUDES TOWARD CHILDREN AND SPOUSES. TWO VERSIONS OF THE FILMS AND RECORDS WERE NARRATED BY (1) "STARS" WHO WERE WELL-KNOWN MOVIE AND TELEVISION PERSONALITIES, OR (2) "EXPERTS" WHO WERE PRESENTED AS PROFESSIONALS. MATERIALS WERE DISTRIBUTED TO 47 SELF-DIRECTED GROUPS OF PARENTS ACROSS THE COUNTRY. GROUPS MET ONCE A WEEK FOR 10 WEEKS TO VIEW THE FILMS, HEAR THE RECORDS, AND DISCUSS THE CONTENTS OF EACH. ANALYSIS OF QUESTIONNAIRES FILLED OUT BY THE SUBJECTS REVEALED THAT (1) INFORMATION LEVELS INCREASED, (2) ATTITUDES CHANGED POSITIVELY TO SOME EXTENT, (3) REALISTIC ATTITUDES TOWARD DEAFNESS AND FEELINGS OF CONFIDENCE CHANGED, AND (4) VARIATIONS IN NARRATOR AND THE PRESENTATION ORDER OF "INFORMATION" AND "ATTITUDE" SERIES HAD ALMOST NO STATISTICALLY SIGNIFICANT EFFECT. (JM)

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AN EXPERIMENTAL EVALUATION OF AUDIO-VISUAL METHODS: CHANGING ATTITUDES TOWARD EDUCATION

Malcolm W. Klein

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STAFF

Edgar L. Lowell . . . . . Principal Investigator

Malcolm W. Klein . . . . Research Associate

Blanche Margulies . . . . Research Assistant

CONSULTANTS

Louise Tracy

Alathena J. Smith

Marguerite Stoner

Mary Wales

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I. The Proposal

The basic objective of the research reported herein was to evaluate the effectiveness of a particular audio-visual program on the attitudes and information level of parents of young deaf and hard of hearing children. It was felt that this population, while severely restricted on the surface by the presence of handicapped children, might serve as a sample of a far more extensive population of parents characterized by high interest in the teaching and training of their children. The research program as proposed and later amended was designed to answer the following general questions with respect to this selected population:

A. Will audio-visual narrators with different sources or "types" of high prestige differentially affect levels of information and attitude change?

B. Will different orders of presentation of (1) educational and (2) attitudinal materials differentially affect levels of information and attitude change?

C. Will levels of information and attitude change be a function of prior experience and personality characteristics?

The above questions assumed, of course, that the audio-visual materials to be constructed would have an over-all positive effect; i.e., they would lead to a gain in information level and a change in attitudes toward the positions advocated by the materials. Properly speaking, this assumption should be included above as a question to be answered by the research design. In actuality – especially with respect to information levels – a positive finding was a foregone conclusion.

The audio-visual program was composed of two versions of 18 films and records plus one longer introductory film and record. Briefly, the program

was carried out by having self-organized groups of parents meet each week for 10 weeks, each meeting being devoted to viewing two films, listening to two records, and discussing these materials during a break inserted into each record (with the exception of the first week in which the longer introductory film and record were used). The two versions of the 18 films and records were identical in all respects, except for the narrator. In the "star" version, the narrators were well-known movie and television personalities, while in the "expert" version the narrators were fictitious professionals (Appendix I lists both sets of narrators as they were announced both on the films and the records). These two narrator versions were constructed in order to answer Question A, above.

Question B was built around the fact that the 18 film-record units consisted of two series. The "information series" included nine film-record units in which a didactic approach was used to teach a number of concepts and techniques employed by the John Tracy Clinic. These materials concentrated on the nature of deafness and means for teaching lipreading and communication skills to young deaf children. The "attitude series" consisted of nine film-record units in which the Clinic's concepts of child-rearing and family relations were illustrated by either positive or negative example of two families, one troubled and one relatively stable, over a span of several days. The preferred attitudes and approaches were not spelled out as explicitly in the attitude series as in the information series. Question B, which was concerned with alternative orders of presenting informational and attitudinal materials, led to the introduction of four modes of presentation of the two series. In the first, the entire information series was run, followed by the entire attitudinal series. In the second, the above procedure was reversed. The other two modes of

presentation involved presenting one information unit and one attitude unit at each meeting. In the third mode, the information unit preceded the attitude unit, and in the fourth, this order was reversed. The general purpose here was to ascertain whether exposure to affect-level material would be detrimental to the acquisition of didactically presented teachings and skills if these latter were presented after the affect-level (attitudinal) materials. Remembering that there were two narration versions of each series, it can be seen that narration and order of presentation combined, as the two induced independent variables, to yield eight experimental conditions, as diagrammed below:

Narration

Orders of Presentation*	Star	Expert
(9I) - (9A)		
(9A) - (9I)		
9 (I-A)		
9 (A-I)		

*(9I) - (9A) indicate that all nine information film-record units preceded all nine attitude units. 9 (I-A) indicates that at each meeting the information unit preceded the attitude unit.

To further clarify this system, the following diagram expands this design by indicating the weekly progression of film-record units in each experimental condition for the "star" narration condition. The identical scheme was followed for the "expert" condition.

Time	(9I) - (9A)	(9A) - (9I)	9 (I-A)	9 (A-I)
1st week	Introductory Unit*	Introductory Unit*	Introductory Unit*	Introductory Unit*
2nd week	Info. #1 - Info. #2	Att. #1 - Att. #2	Info. #1 - Att. #1	Att. #1 - Info. #1
3rd week	Info. #3 - Info. #4	Att. #3 - Att. #4	Info. #2 - Att. #2	Att. #2 - Info. #2
4th week	Info. #5 - Info. #6	Att. #5 - Att. #6	Info. #3 - Att. #3	Att. #3 - Info. #3
5th week	Info. #7 - Info. #8	Att. #7 - Att. #8	Info. #4 - Att. #4	Att. #4 - Info. #4
6th week	Info. #9 - Att. #1	Att. #9 - Info. #1	Info. #5 - Att. #5	Att. #5 - Info. #5
7th week	Att. #2 - Att. #3	Info. #2 - Info. #3	Info. #6 - Att. #6	Att. #6 - Info. #6
8th week	Att. #4 - Att. #5	Info. #4 - Info. #5	Info. #7 - Att. #7	Att. #7 - Info. #7
9th week	Att. #6 - Att. #7	Info. #6 - Info. #7	Info. #8 - Att. #8	Att. #8 - Info. #8
10th week	Att. #8 - Att. #9	Info. #8 - Info. #9	Info. #9 - Att. #9	Att. #9 - Info. #9

*The introductory film and record used the same narrator, Mrs. Spencer Tracy.

Another series of concerns is summarized in Question C above, and certain information was gathered from the experimental subjects in order to obtain answers. Most of this information concerned the backgrounds and current status of the subjects, such as age, educational level, exposure to training materials on the deaf, etc. These will be discussed further in a later section of this report. In addition, each subject responded to the Rokeach D (Dogmatism) scale.[1] This scale, consisting of 40 items, purports to measure what its author terms the dimension of "openness-closedness" of the mind, i.e., the degree to which a person is flexible, subject to change upon contact with new

[1]Rokeach, Milton, The Open and Closed Mind, New York, Basic Books, 1960.

information, or able to discard a belief system in the face of a situation for which this system seems objectively to be inappropriate. The D scale is said to be a more valid measure of authoritarianism than the original F scale of Adorno et al.[2]

The D scale was employed in the present experiment because of its obvious face relevancy to the major dependent variables, changes in information level and attitudinal position. Also, since an essential part of Rokeach's conceptual system revolves around the dogmatic individual's adherence to authoritative sources of information, it was felt that inclusion of the scale might throw light on differences attributable to the induced narration variations.

A later section of this report will spell out in detail the measurement procedures used for the major dependent variables, so at present only brief mention will be made of these variables. They include:

1. Information Change – items drawn from the content of the films and records of the information series.

2. Attitude Change – items drawn from statements and implicit concepts taken from the attitude series.

3. Deafness Reality Index – items assessing the realistic appraisal of the nature of deafness as a permanent handicap.

4. Educational Progressivism Change – items developed to assess one's position on the dimension of educational progressivism.

5. Educational Traditionalism Change – items developed to assess one's position on the dimension of educational traditionalism.

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[2]Adorno, T. W., Else Frenkel-Brunswik, Daniel Levinson, and R. Nevitt Sanford, The Authoritarian Personality, New York, Harper, 1950.

6. Educational Valence Change – items designed to tap the degree to which one is positively attracted to the concept of education as "good," per se.

7. Time Commitment Change – item eliciting the amount of time spent during the preceding week in teaching the child to lipread, speak, etc.

8. Confidence Change – item eliciting the parent's confidence in his or her ability "to raise a deaf child to lead a happy, productive life of his own."

II. The Mechanics

A. Audio-Visual Materials

The making of the films and records was a combined effort of the John Tracy Clinic and the Cinema Department of the University of Southern California. Additional work and counsel were received from a number of parties, most notably from the Walt Disney Studios. Scripts invariably went through numerous major and minor revisions, and compromises between educational values and technical requirements were the rule. In all cases, final approval by Clinic personnel was obtained prior to filming or recording. The films which resulted were black and white sound films averaging 10 minutes each. The recording which followed each film was made on a 10" long-playing disc and averaged 20 minutes. The only exception was the introductory film of 20 minutes and recording of a half hour. In order to give some inkling of the content of the films and records, the titles are listed below with brief descriptions. The information series begins with excerpts from Disney and CBS television "shorts" on the nature of hearing, switches to demonstrations with several children, and in the third through ninth films concentrates on one child and her parents. The attitude series throughout focuses on one four-member family which is having serious emotional, relational problems, and occasionally contrasts this family situation with the next-door neighbors' situation which is far more relaxed and geared toward effective socialization processes.*

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*A complete set of the films has been deposited with the Office of Education, in the "Captioned Films for the Deaf" Department.

BRIEF DESCRIPTION OF
JOHN TRACY CLINIC PARENT EDUCATION FILM SERIES

INTRODUCTION

In explaining the purpose behind the Clinic's production of the nine films and records of the "Information" series and the nine of the "Parent Attitude" series, Mrs. Spencer Tracy emphasizes how important it is for parents to be aware early of their child's deafness, and then to accept it and know what to do about it. Mrs. Tracy describes some of the ways in which a parent can help his child during the beginning lipreading stages.

INFORMATION SERIES

1. HEARING AND NOT HEARING: The anatomy and functioning of the ear are graphically described in a cartoon excerpt from the Disney film "You and Your Ears." This is followed by an excerpt from a CBS Television film in the "Adventure" series illustrating how an audiogram is made and what is meant by volume loss and frequency loss in terms of what a deaf child hears.

2. GETTING THE IDEA: This film shows the dawn of language understanding in children. A parallel is drawn between the language development of a deaf baby and that of a hearing baby as we see a hearing child beginning to understand the meaning of a single word, "milk." In talking to her child, the mother is reminded to choose useful and interesting words, to repeat them constantly, and to match them with appropriate experiences.

3. TALK, TALK, TALK: The parents' role in training a child to become a good "lip watcher" is the main theme of this film. Some useful techniques in drawing the child's attention to the speaker's face are

demonstrated, and the child's progress from "fleeting glances" to "purposive looks" is illustrated.

4. STEPPING STONES: The film material now passes from the area of general lipreading to that of specific lipreading. The choice of a suitable word to work on is discussed in detail. Emphasis is given to the importance of planning opportunities for the use of the word and of combining with these the use of unplanned opportunities.

5. CHECK AND DOUBLE CHECK: The child is now asked to demonstrate by action that he understands the meaning of a word, and this film is concerned with instructing the parents how to obtain such evidences by means of the child's responses.

6. THE BEGINNINGS OF SPEECH: Work on expressive, or spoken, language as opposed to merely receptive language is now introduced. The choice of a suitable beginning word – in this case, the word "up" – is discussed. Work on an expressive language word is seen as passing through four stages: understanding, imitation, reminding, and spontaneous expression.

7. HOLDING THE REINS: Some suggestions are made to parents on how to maintain the child's interest in his "lessons," and how to handle him in situations when he refuses to cooperate fully and attempts to "test" the established behavioral limits.

8. MAKING A CHOICE: This film introduces the presentation to the child of two contrasting lipreading words – "airplane" and "shoe" – and shows how parents may help him to distinguish between them. Various techniques by which parents can assist the child to make quick and accurate responses are demonstrated.

9. EYES, EARS AND HANDS: The multi-sensory approach is demonstrated, and suggestions are made as to how parents can increase their child's awareness of sound through auditory training and the use of touch. The use of eyes, ears and hands are shown both separately and combined. The film ends with a short sequence showing a little deaf girl holding spontaneous conversation with her parents in a natural setting.

PARENT ATTITUDES

1. FUNDAMENTAL NEEDS OF PEOPLE: The film introduces us to the Johnson family in their home. We see Dick and Ann as parents of a hearing daughter, Patty, and a deaf son, Eric, age 3 1/2. We are made immediately aware of an atmosphere of tension that is transmitted from the parents to the children. The possible causes of this tension, both internal and external, gradually come to light as the film series progresses. It is the intention of this film and the accompanying record to point out some fundamental human needs — the need to be loved, the need to know what we may do and not do, to feel we are worth-while persons, to be together with others, and to have our preferences and rights respected.

2. LEARNING TO LIVE TOGETHER: Since, when people live together there is likely to be conflict of interest, part of the growing up process is learning how to compromise, to give as well as take, to go without, to have things taken away. This learning comes slowly and in necessary stages of development. This film shows some of the mistakes Ann makes because she does not realize that her children are at an "in-between" stage of their social development.

3. FEELINGS: Discussion is invited on the nature of our feelings and the manner in which we may safely express them. Not only are the parents, Dick and Ann, having trouble with their own feelings, but by their manner of handling their children, they are probably creating in them confused and negative feelings that are bound to lead to further trouble.

4. LEARNING: The theme here is the role of parents in helping their child during the learning process by giving him the freedom to learn in his own good time about the things that he is interested in, by being available when needed, and by tuning their expectations to his developmental level.

5. DISCIPLINE: The ineffectiveness of Dick and Ann in disciplining their children is contrasted here with the apparent success of the Millers, two neighbors, with their children. The setting of sound limits, followed by a firm and consistent carry-through, is demonstrated. True discipline is seen to lie in the parents' good relationship with their children, built on a foundation of love and understanding.

6. PARENTAL ASPIRATIONS: An enlightening conversation between the Johnsons and the Millers about their children's futures reveals that the Johnsons' ambitions for their children are really their own ambitions and have little to do with their children's natural pattern of development.

7. CREATIVE PLAY: The nature and value of creative play is discussed, and some suggestions are made as to the materials and facilities that parents may conveniently provide in the home. Ann fails to stimulate and maintain her children's interest in creative play since she has understood neither the various stages of the creative process nor the role the parent can play in encouraging freedom of expression within established limits.

8. ANGER AND FEAR: Anger and fear are normal and natural emotions, control of which is part of the learning process. The parents' role

is to help the child to manage these feelings rather than suppress them. In this film, Dick is shown as being unable to help his children because he is so full of suppressed anger and fear himself. Ann, too, comes to recognize that a large part of her unhappiness stems from her own immaturity.

9. PROBLEM SOLVING: As the story ends, we are left with the knowledge that, while Dick and Ann have a long way to go before their problems are solved, the first steps have been made. They have begun to face problems, to realize some of their possible causes, and, above all, to talk to each other about them.

B. Subjects

Because the experiment was to be conducted on a nation-wide basis, with all the expenses and difficulties entailed in such an enterprise, it was necessary to form groups of parents to participate in the study. Since many areas are still without any trained professional help in educating preschool deaf children, it was decided to have all groups participate without professional workers at hand. Thus initial contacts were made with known parents rather than professionals. It was hoped that six groups could be formed for each of the eight experimental conditions, each group containing from 10 to 20 individuals (hopefully to include as many fathers as mothers). With a minimum of 48 groups needed, each composed of 10 to 20 parents of preschool deaf or hard of hearing children (no multi-problem children were to be included), it was obvious that a wide search net would have to be put out. Fortunately, the resources were at hand through the auspices of the Clinic's Correspondence Course.

An invitation to form a group for the experiment was sent to approximately 2, 300 families enrolled in the Correspondence Course between November 1958 and March 1961. In response to this mailing plus a certain amount of continuing correspondence, a total of 94 individuals were identified as willing to form a group. In time, it became clear that many of these would be unable to follow through and the list eventually decreased to the point that 50 potential groups were available at the start of the experiment. Three more dropped out during the first few weeks of the experiment, so that there remained 6 groups in each of seven experimental cells, and five in the remaining cell.

Originally, average group size was 13 members, almost evenly divided between men and women. However, attendance decreases and failures to return all three sets of questionnaires used in the analysis further reduced effective mean group size to less than ten members per group. It is clear from the foregoing that an experiment of this sort, carried out as it was strictly by correspondence, does not result in the selection of a representative sample of the original population. There are far too many factors affecting sample selection which are not under the control of the investigator. At the same time, it is also true that at least one important variable is maximized – the motivational level of the subjects. The parents volunteered to take part in the study, maintained their interest through months of delay while film production problems were solved, attended a ten week series of meetings, and filled out both a preliminary questionnaire and three waves of another over almost a four month period. This group constituted a highly interested, highly motivated sample. In fact, so select must they be that one might well consider them to constitute a statistical universe of such individuals. Positive findings can be expected to apply to similar self-selected populations. Negative findings by the same

token would suggest that the hypothesized relationships would in all likelihood not hold true for any group. In reading the findings of this report, these comments should be kept in mind.

C. Controls

Field experiments are often characterized by a lack of scientific controls, since such controls are often not practically feasible, even if theoretically possible to obtain. In the present study the problem was further complicated by the fact that groups were used as the experimental units. It was clearly not possible to organize a like number of control groups which would meet for ten weeks but not be exposed to the experimental materials and manipulations. Still, it did seem advisable to attempt an assessment of normal change over the ten-week experimental period with a similar sample of subjects. Also, because the readministration of questionnaires to the experimental subjects raised problems of sensitization to the assessment materials, it seemed advisable to evaluate the effects of this sensitization by administering the questionnaires to a similar sample over the same time period.

Accordingly, four sets of "pseudo-control groups" were established. Subjects were volunteers from (a) the original subject-selection group of 2300 Correspondence Course parents who responded affirmatively to the original invitation but were unable to form a group for lack of enough members, (b) originally signed-up subjects who had been unable to continue because of residence changes or failure of their group to maintain itself, and (c) drop-outs from the experimental groups whose reason for dropping out was not clearly relatable to lower motivation, e.g., residence changes, ill health, etc. The same background data were obtained on control subjects as on the experimental

subjects, and they were assigned to one of four control conditions in such a way as to have all four equated initially with the experimental subjects on distributions of age and educational level.* The control conditions, differing only in exposure to measurement instruments, were set up as follows:

Control A: "Before," "After," and "Delayed After" questionnaires.

Control B: "Before" and "Delayed After" questionnaires.

Control C: "After" and "Delayed After" questionnaires.

Control D: "Delayed After" questionnaire.

Administration of instruments to the control subjects was timed to coincide with that for the experimental subjects. Thus comparisons with changes among experimental subjects were made available to estimate the degree of change, if any, attributable both to the independent variables and to exposure to the measuring instruments themselves. However, such comparisons can legitimately only be visual, rather than statistical, due to the group "N" in one case as opposed to the individual "N" in the other. Where units of analysis differ, comparisons must be carefully qualified.

D. Instruments

All of the instruments used in the study are reproduced in Appendix V, but some description of each is necessary here in order to understand the nature of the findings to be reported.

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*Later, they were also matched as closely as possible on initial levels on information and attitude tests.

1. "Group Assignment" Questionnaire: As soon as a subject was enlisted, he (or she) completed an 18-item questionnaire. Subjects were assigned to groups, and groups to experimental conditions, on the basis of six factors derived from this questionnaire. These factors were age, age of oldest deaf child, educational level, perception of degree of child's deafness, perception of degree of child's handicap, and exposure to materials on deafness. This last factor was grossly estimated by combining responses on questionnaire items 12 through 18 inclusive. The same factors were employed to select control condition subjects to be used in the analyses, such that the mean factor scores in the control conditions were as similar as possible to the group mean factor scores of the experimental subjects.

2. "Before" Questionnaire: This was administered at the beginning of the first meeting of each group (and during the same week was delivered to subjects in Control Groups A and B). It consisted of the following tests and scales:*

a. Information Test (IPP 1-4): an 18 item test of information contained in the Information Series, evenly spread throughout film-record sets Nos. 1 through 9.

b. Attitude Test (A 1-4): 27 items (excluding Nos. 2, 6, 14, 22, and 29) testing acceptance or rejection of positions advocated or implicit in the Attitude Series. In most cases, three items were taken from each of film-record sets Nos. 1 through 9.

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*Identifying letters refer to pages of instrument as reproduced in Appendix V.

c. Deafness Reality Index: Attitude items No. 2, 6, 14, 22, and 29 designed to assess whether or not the Attitude Series has the undesired side effect of decreasing the subject's realistic understanding of the problems entailed by deafness.

d. Rokeach "Dogmatism" Scale (D 1-3): A 40 item scale measuring the degree to which the subjects' have an "open" or "closed" mind, i.e. are flexible when confronted with information or concepts which fail to "fit" with the subjects' current orientations. The Dogmatism scale was not given to the control groups.

e. Educational Progressivism Scale (MKP): An eight item scale, with a r_{++} of .63, which assesses the subjects' espousal of a "progressive" educational value orientation.*

f. Educational Traditionalism Scale (MKT): A nine item scale with a r_{++} of .51, which assesses the subjects' espousal of a "traditionalist" educational value orientation.*

g. Kerlinger-Kaya Progressivism Scale (KKP): Similar to (e.) above, and included for validation and comparative purposes.** This scale was not given to the control groups.

h. Kerlinger-Kaya Traditionalism Scale (KKT): Similar to (f.) above, and included for validation and comparative purposes.** This scale was not given to the control groups.

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*These scales were developed specifically for use in the present study. They represent two orthogonal factors which emerged from a modified linkage analysis of a 155-item questionnaire given to a sample of 353 parents of kindergarten children. A report on this scale development project entitled "Attitudes toward Education: A Preliminary Report" is available in limited supply from the John Tracy Clinic.

**See Kerlinger, Fred N., and Esin Kaya, "The Construction and Factor Analytic Validation of Scales to Measure Attitudes toward Education" and "The Predictive Validity of Scales Constructed to Measure Attitudes toward Education," Educational and Psychological Measurement, 1959, 19, Nos. 1 and 3.

i. Educational Valence Scale (EV): Eight items assessing an overall favorable attitude toward education as a "good" or valued concept per se (r_{π} = .68). This scale is unrelated to Traditionalism (MKT) but positively correlated with Progressivism.

j. Time Commitment and Confidence (FS): Item No. 4 assesses, using group scores only, the average time spent by the parent in speech lessons and practice. Item No. 5 assesses one's confidence in the ability to overcome the deafness handicap in child-raising.

3. "After" Questionnaire: This was distributed at the end of the final group meeting, to be filled out and returned as soon thereafter as possible. It was delivered at the same time to members of Control groups A and C. However the IPO test (see below) was not given to the control groups since the items contained pivotal phrases peculiar to the Clinic approach and not necessarily in general use.

a. Information Test (IPP 1-4).

b. Information Test, post-experimental only (IPO 1 and 2): nine items, one from each film-record set in the Information Series. These items contained specific Clinic phraseology, making them applicable only to the experimental subjects, and only at the conclusion of the film series.

c. Attitude Test (A1-A4).

d. Deafness Reality Index.

e. Educational Progressivism Scale (MKP).

f. Educational Traditionalism Scale (MKT).

g. Educational Valence Scale (EV).

h. Time Commitment and Confidence.

4. "Delayed After" Questionnaire: This was identical to the "After" questionnaire. It was delivered to all subjects – experimental and control – approximately 10 weeks after administration of the "After" Questionnaire.

E. Distribution of Audio-Visual Materials

Appendix III contains the time schedule for the mailing of the experimental materials to the 48 groups taking part in the study. Included with the films and records were instructions to the group organizer concerning questionnaires, order of presentation of the two films and records for that week, narrator announcements (to guarantee induction of this variable), and return mailing materials and procedures. Following the first week in which the introductory materials were sent, each mailing involved six duplicate packages of each of eight combinations of materials. Materials were distributed to each group sufficiently in advance of the scheduled group meetings to avoid delays or postponements. Throughout the entire 10 week viewing period, only one postponement was necessary, that being the result of a freak storm in Florida. All in all, then, despite the complex distribution problems and dependence on long-distance correspondence, along with a minimum of control by the experimenters over potential disruptions, the experimental manipulations were carried out with a minimum of effective difficulties.

III. Findings

A. The Experimental Subjects

As can be seen from the map in Appendix II, the experimental subjects were distributed across the nation, with a tendency to cluster in areas of greatest population density. While it cannot be said that they constitute a perfectly representative sample of parents of young children, or young deaf children, across the country, it is clear that over-representation of any one large area has been avoided. There is probably a somewhat lower representation of rural areas than exists in the total population, due to the difficulty of forming parent groups in such areas.

The remaining descriptive information on the subjects is derived from their responses to the "Group Assignment" questionnaire and is reported in Table I. We report here only the mean for each item (except sex) since our purpose is to describe briefly, not analyze. In addition, because of the inevitable dropout problem over a data collection period stretching into several months, we report the data not only for the original subjects but also for the cohorts remaining at the three principal data collection points in time.

Table I: Descriptive Data on Subjects at Three Points of Analysis*

Items	"Before" Questionnaire (N-474)	Subjects Returning: "Before" & "After" Questionnaires (N-397)	"Before," "After" & "Delayed After" Questionnaires (N-294)
Sex	56% Female	56% Female	57% Female
Age	31.18**	31.43	31.42
Age of Oldest Deaf Child	3.78**	3.77	3.80
Education[1]	3.23**	3.23	3.18
Perceived Handicap[2]	1.81**	1.82	1.83
Perceived Deafness[3]	2.34**	2.41	2.45
Exposure to Materials[4] and Experiences in Deafness	3.40**	3.61	3.73

*Not included in the table are people who did attend at least one meeting (the criterion of inclusion in the analysis) but returned no questionnaires (24) or only the "After" Questionnaires (6) or only the "After" and "Delayed After" Questionnaires (20).

**Figures based on group means (N-48).

Notes:
1. Four point scale: 1-less than 9th grade; 2-less than high school graduation; 3-high school graduation; 4-post graduate
2. Three point scale: 1-extreme; 2-moderate; 3-slight
3. Four point scale: 1-completely deaf; 2-almost completely deaf; 3-seriously hard of hearing; 4-moderately hrad of hearing
4. Range is from 0 to 10, depending on responses to items 12 through 18 in Group Assignment Questionnaire. A high score indicates greater exposure to relevant materials.

The very slight changes over the three time periods are clearly not such as to raise serious problems for analysis or conclusion drawing. Whatever the factors were which were primarily responsible for dropouts and failures to return questionnaires, they were evidently not systematically related to characteristics of the subjects of presumed relevance to the dependent variables in the study. In other words, it is the implication of the data reported in Table I that conclusions drawn about subjects returning all questionnaires would apply equally well to all the subjects, had all completed the 10 weeks of meetings and returned all three questionnaires. Finally, reading down any of the three columns in Table I will provide for the reader an estimate of the "typical" subject. There is no need here to describe the subjects further.

B. Group Observations

Because the experimental groups were so widely dispersed across the country, it was difficult to determine exactly how the meetings took place and what transpired in them – especially during the discussion periods in the middle of each recording. In order to obtain at least a partial picture of the group processes involved, four persons were hired to observe five of the groups over the 10-week study period (one of these alternated between two groups in the same city).* Each observer had had training and experience in group observation, and was given specific instructions as to points of concentration. The

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*The observers were Betty Berzon (Staff Associate, Western Behavioral Sciences Institute), Deborah Shapiro (advanced graduate student, New York School of Social Work, Columbia Univ.), Edward A. Nelson (advanced graduate student, Stanford University), and Thomas Harford (advanced graduate student, Boston University).

observers mailed to the clinic a report of each meeting on the day following the meeting, which provided a running account of proceedings and problems. Careful study of the observation reports plus personal discussions with a number of the group organizers and members in the months following the study permit the following generalizations:

1. There was great variance between the groups with respect to their reactions to the materials. Some preferred the Information Series, some the Attitude Series. Some depended almost solely on the materials presented while others made far greater use of their own experiences. Some became quite involved, others retained a rather detached attitude.

2. Interest moved from a generally moderate level in the first few meetings to a peak at about the 6th meeting, and then dropped consistently through the remainder of the program.

3. Group discussions followed the above (2) interest pattern, but seldom involved more than a slim majority of group members.

4. As the weeks passed, participants grew steadily more adept at relating the filmed episodes to their own children, but at no point did they seem able or willing to relate these episodes to themselves as parents or as marital partners. This point relates particularly to the Attitude Series.

5. The Attitude Series was quite successful in making its points about family relationships. Viewers picked out these points quite readily and discussed them at some length, but only as they referred to the film actors, not to themselves.

6. Discussions generally did not remain focused on pertinent subject materials, but wandered off tangentially at many points.

7. The most salient materials from the Attitude Series were those dealing with the areas of aspirations, discipline, and emotional controls.

8. The Information Series, while perceived as too elementary by some of the viewers, was more successful in eliciting personally relevant discussions.

9. The relevance of the materials in the Attitude Series to parents of deaf children was not immediately clear to some of the viewers.

10. There is a tendency for the more experienced parents to assume the role of "expert," and for others to reinforce such role assumption.

The above statements lead to several tentative conclusions. First it is clear that the audio-visual materials used in this study were not universally successful in arousing and maintaining high interest levels, and that reactions were highly variable across groups. Relevance to personal situations of the subjects was often not recognized (or was repressed in the group setting). In addition, the two film series were not comparable in motivating interest. All of this suggests that the materials themselves and the mode of their presentation may have placed a ceiling on learnings and attitudinal changes.

A final point, particularly pertinent to future uses of these materials, is that the need of professional guidance and direction is obvious. The presence of a trained family counselor and a trained teacher of the deaf would probably have greatly enhanced the benefit of the materials. As explained earlier, this was not methodologically advisable for the purposes of the present study. However, for pedagogical purposes such professional direction should be strongly encouraged.

C. Attendance

Figure I summarizes the attendance data for the 47 groups that participated through all ten weeks. The overall drop of 14% from first to 10th meeting, under the circumstances under which the study was conducted, should not be considered

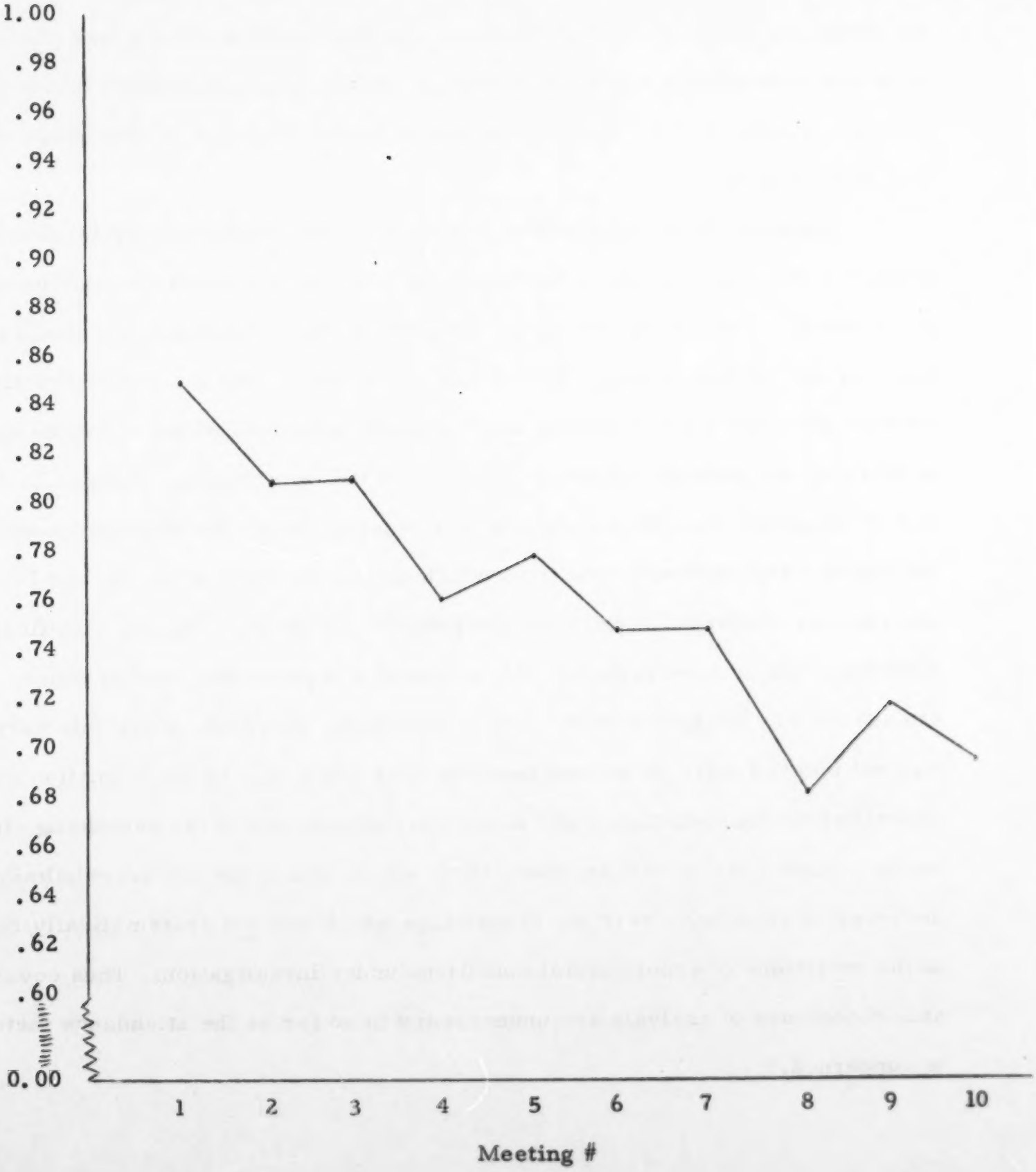

Figure I: Mean Proportional Attendance at all 10 meetings, all groups; by proportion attending meeting X out of all those attending any meeting. (N-47)

a substantial one. Given the facts that the subjects were parents of one or more children, that many worked at night, that the baby-sitting problem is somewhat accentuated for deaf children, and that heavy emphasis was placed on having both parents attend each session (leading some to believe that if both could not attend, neither should), the slight linear decrease in attendance was less than expected.

However, it is important to determine if attendance was systematically related to the experimental conditions, since this might affect the conclusions of the study. That is, assuming for the moment that attendance is related to learning and attitude change, it becomes important to rule out any interaction between attendance rates and the experimental variations whose relationship to learning and attitude change is the focus of the experiment. Figures II, III, and IV illustrate the relevant data in this regard. Of all the differences between the various experimental conditions which appear in Figures II, III, and IV, only one reaches statistical significance beyond the .05 level. The one significant difference can be seen in Figure III, at meeting number one, during which attendance was 11% higher in the "Star" condition. However, since this variable was not induced until the second meeting, this difference is not a function of experimental manipulations, and in any case disappears in the remaining nine weeks. Summarizing briefly, then, there was a steady but not overwhelming decrease in attendance over the 10 meetings which was <u>not</u> systematically related to the variations of experimental conditions under investigation. Thus covariance techniques of analysis are unnecessary in so far as the attendance factor is concerned.

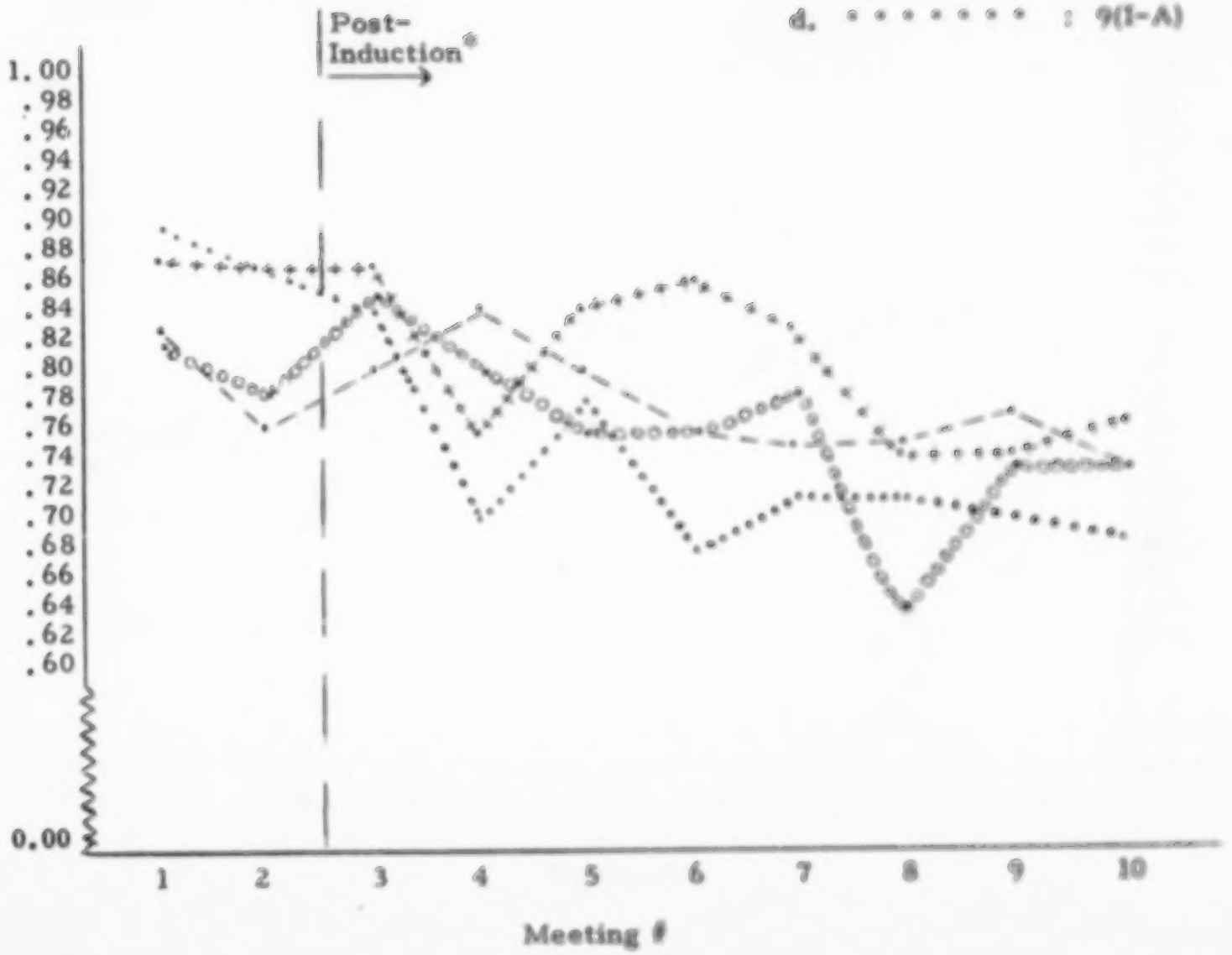

Figure II: Mean Proportional Attendance at all 10 meetings by four "order" conditions Proportion attending meeting X out of all those attending any meeting. ($N_a = N_b = N_d = 12$; $N_c = 11$)

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*Since the order of presentation variable was first introduced in meeting #2, differential effects on attendance could only take place after meeting #2.

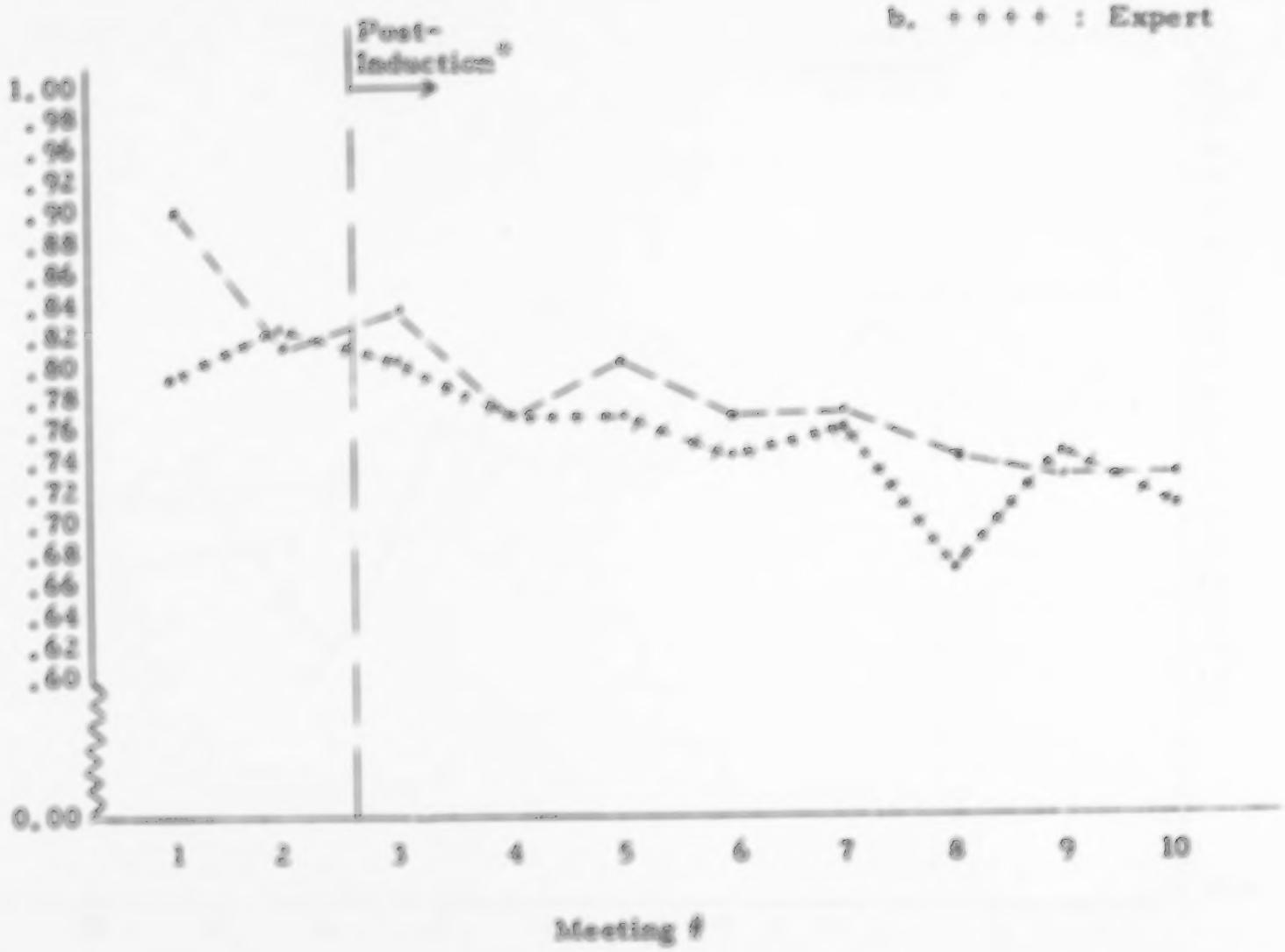

Figure III: Mean Proportional Attendance at all 10 meetings by two "Narrator" conditions; by proportion attending meeting X out of all those attending any meeting. (N_s = 24; N_E = 23)

*See footnote (*), Figure II.

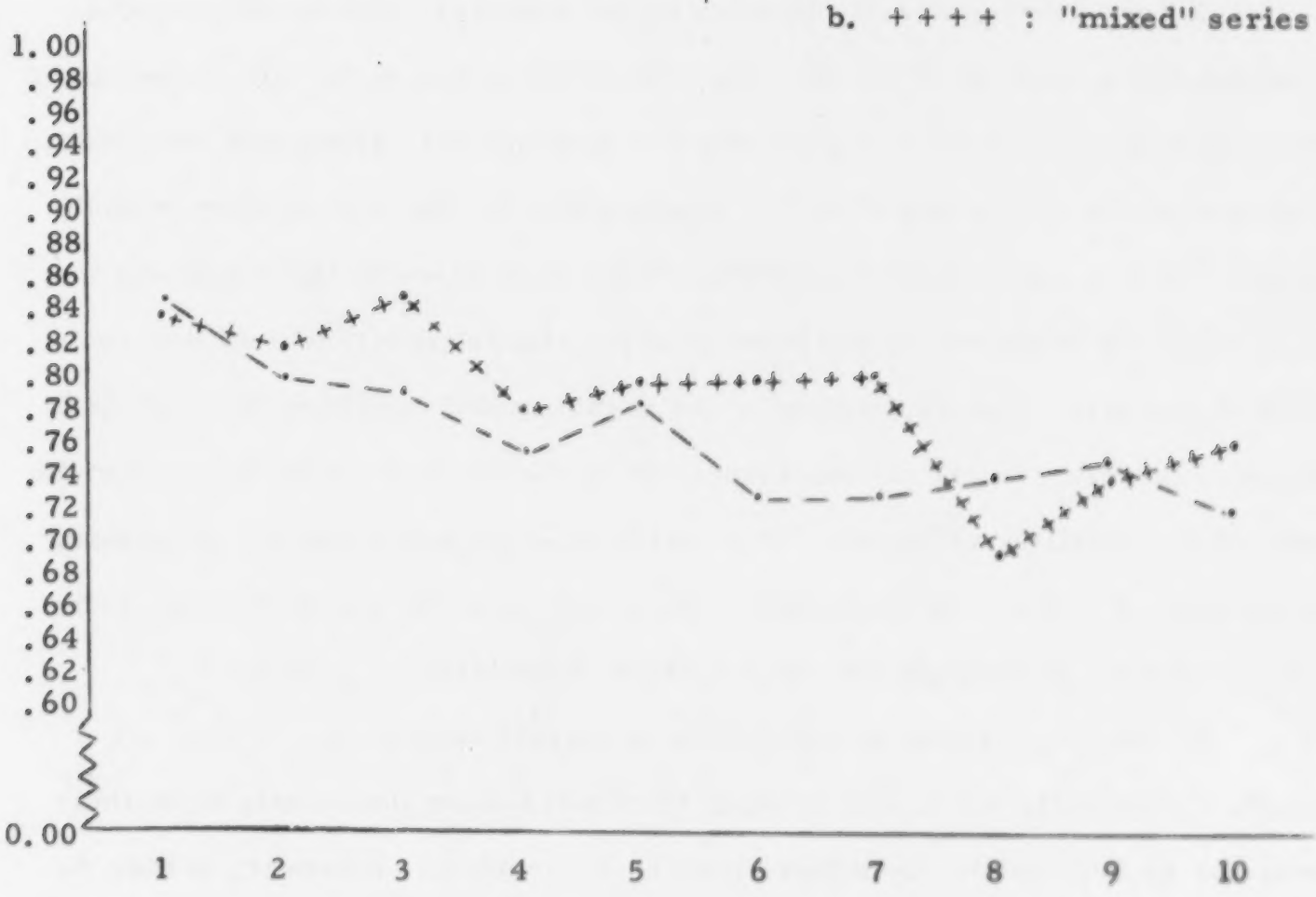

Figure IV: Mean Proportional Attendance at all 10 meetings, "mixed" vs. "pure" conditions: proportion attending meeting X out of all those attending any meeting. (N_m = 23, N_p = 24)

D. Units of Analysis and Ceiling Effects

Before moving directly into the major analyses, two methodological considerations must be covered. The first of these has to do with choosing the most appropriate unit of analysis from two alternatives, group and individual. Ordinarily, the "N" in any study is considered to be the total number of individuals used as experimental subjects. This is justified by the reasoning that each subject's reactions is independent of the others' reactions, so that each subject comprises one replication of the experimental condition in which he is placed. However, there are occasions, as in the present study, where for the sake of practicality, or because of a desire to study group qua group factors, or because of a desire to study individuals in a "natural" group setting, individual subjects go through the experimental procedures in groups.

If mutual presence of individuals is merely spatial, i.e., they are together physically but do not interact or do not behave differently from their behavior as individuals, then there may be no problem. However, if they do interact in any significant manner, there is a problem, for group factors then may bring about changes which would not otherwise have taken place. As an example, consider the situation of these parents who have different levels of experience and knowledge about raising and teaching deaf children. The fact that the more experienced parents tended to take on the role of "expert" has been alluded to in an earlier section. The presence of such expertise might reasonably be expected to improve the change scores of many group members in a way which could not have occurred had the subjects been run individually. Such changes would be a function of group variables, not of the experimental materials and induced variables. The net effect would be to make the materials seem far more effective than they are in and of themselves. To spell this out

in another way, in a ten-member group, a positive change of one point looks like a change of 10 points if an individual rather than a group unit of analysis is employed. Levels of significance are easily come by under such circumstances, and the changes for Type II or Beta error are maximized.

From the above, it is obvious that it would be far safer in the present study to employ a group N. Aside from a preference for assuming the action of group factors in a group setting, several kinds of evidence can be brought to bear to support the assumption that the experimental groups both started out and acted during the experiment as heterogeneous entities. The suggestions of the group observers have already been cited as one kind of evidence. Using scores on the information test as the most appropriate "test case," we can cite the following additional evidence. An analysis of variance of "before" information scores of 393 subjects in 46 groups who also returned "after" questionnaires yielded an F of 2.17, significant beyond the .01 level with 45 and 348 degrees of freedom. This transforms into a significant intraclass correlation of .12. In other words, the groups started off as separable entities. A similar analysis on change scores from "before" to "after" tests yielded a significance level of .06. That is, the groups also reacted as separate units to the information series. Under these circumstances, it was decided to base the major analyses on a group N.

The second consideration to be raised is that of ceiling effects. Whenever one tests for change, he must be aware of this effect, which refers to the obvious fact that those who score high initially cannot exhibit much change to even higher levels. Failing to test for ceiling effects and failing to account for them when they do in fact exist can lead to Type I or Alpha error, i.e., failing to show hypothesis confirmation where it does exist. In order to determine in the present study whether the ceiling effect was sufficient to require

data transformation, a systematic random sample was drawn of 96 subjects, and their initial and change scores were plotted for both information and attitude tests. Figures V, VI, VII, and VI demonstrate that the relationships are strong.

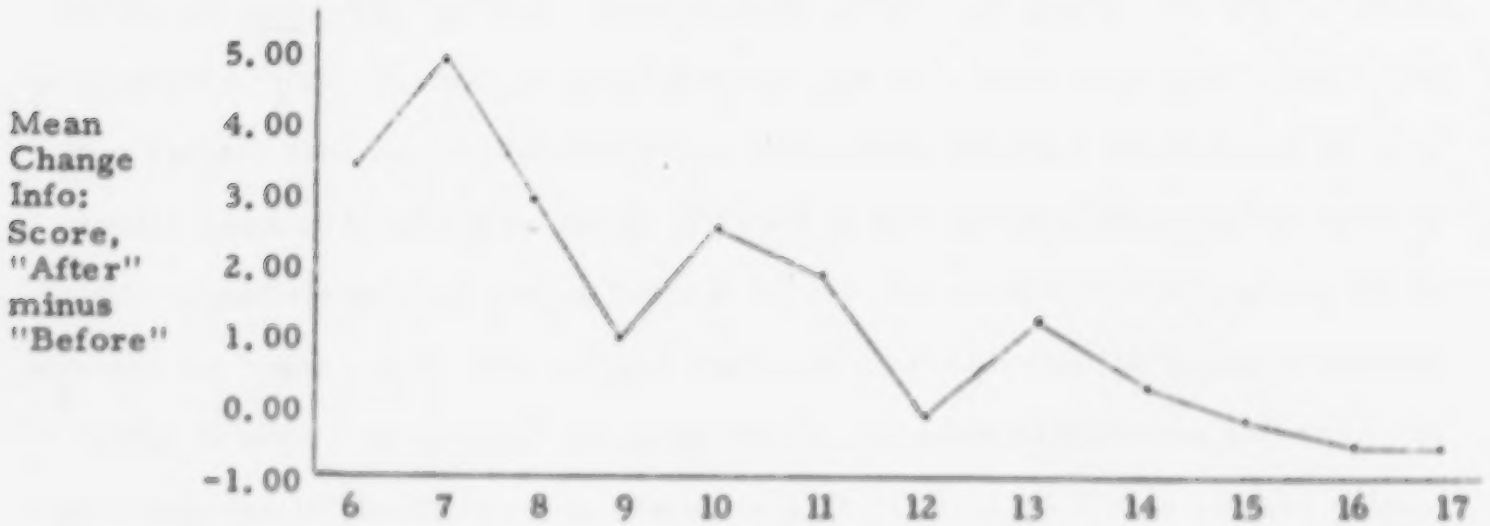

Figure V: Initial Position vs. Change-Information, "Before" to "After" (N = 96).

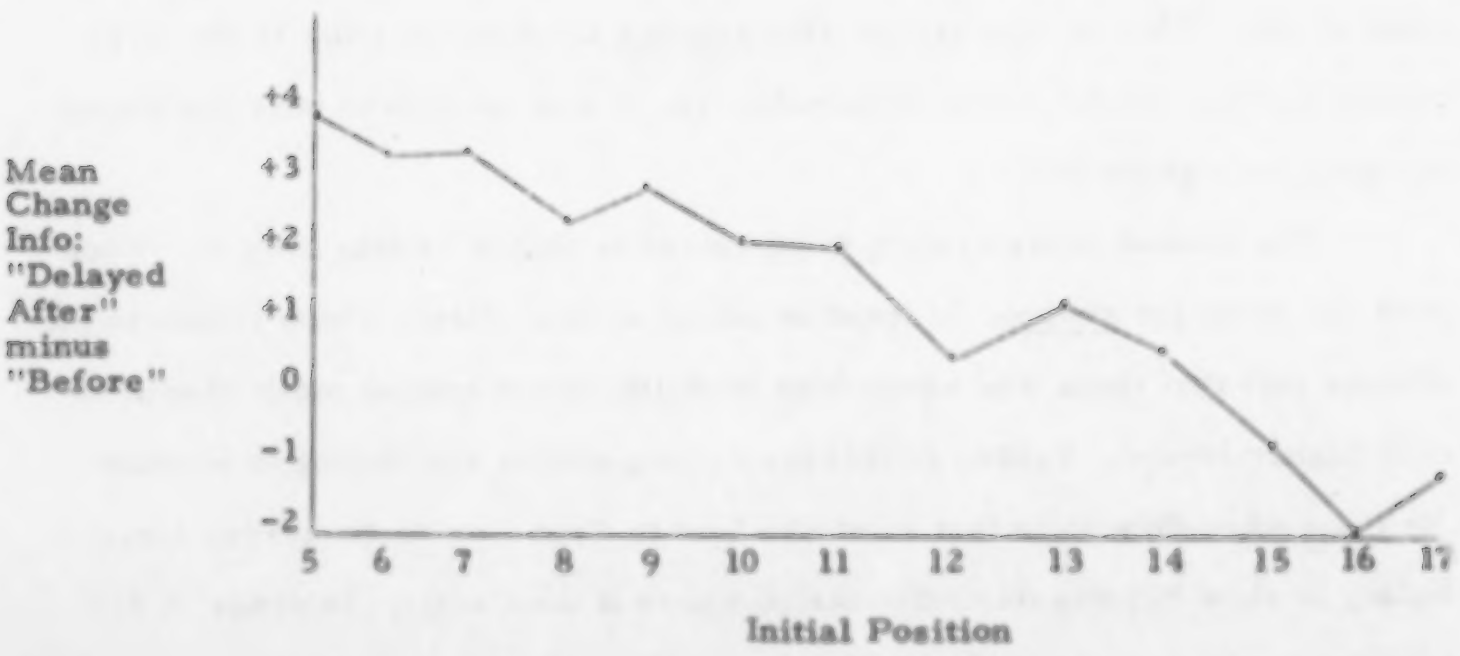

Figure VI: Initial Position vs. Change-Information, "Before" to "Delayed After" (N = 96).

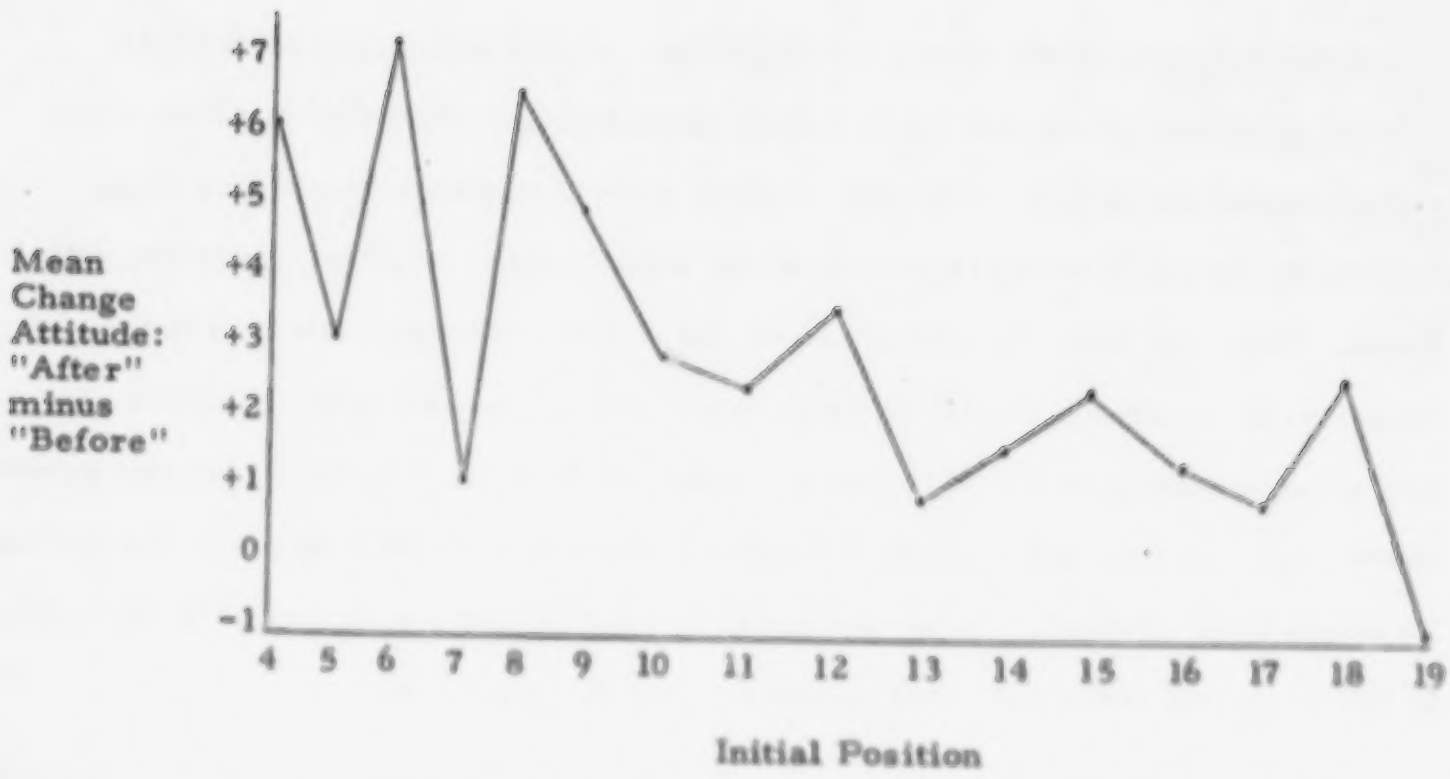

Figure VII: Initial Position vs. Change-Attitude, "Before" to "After" (N = 96).

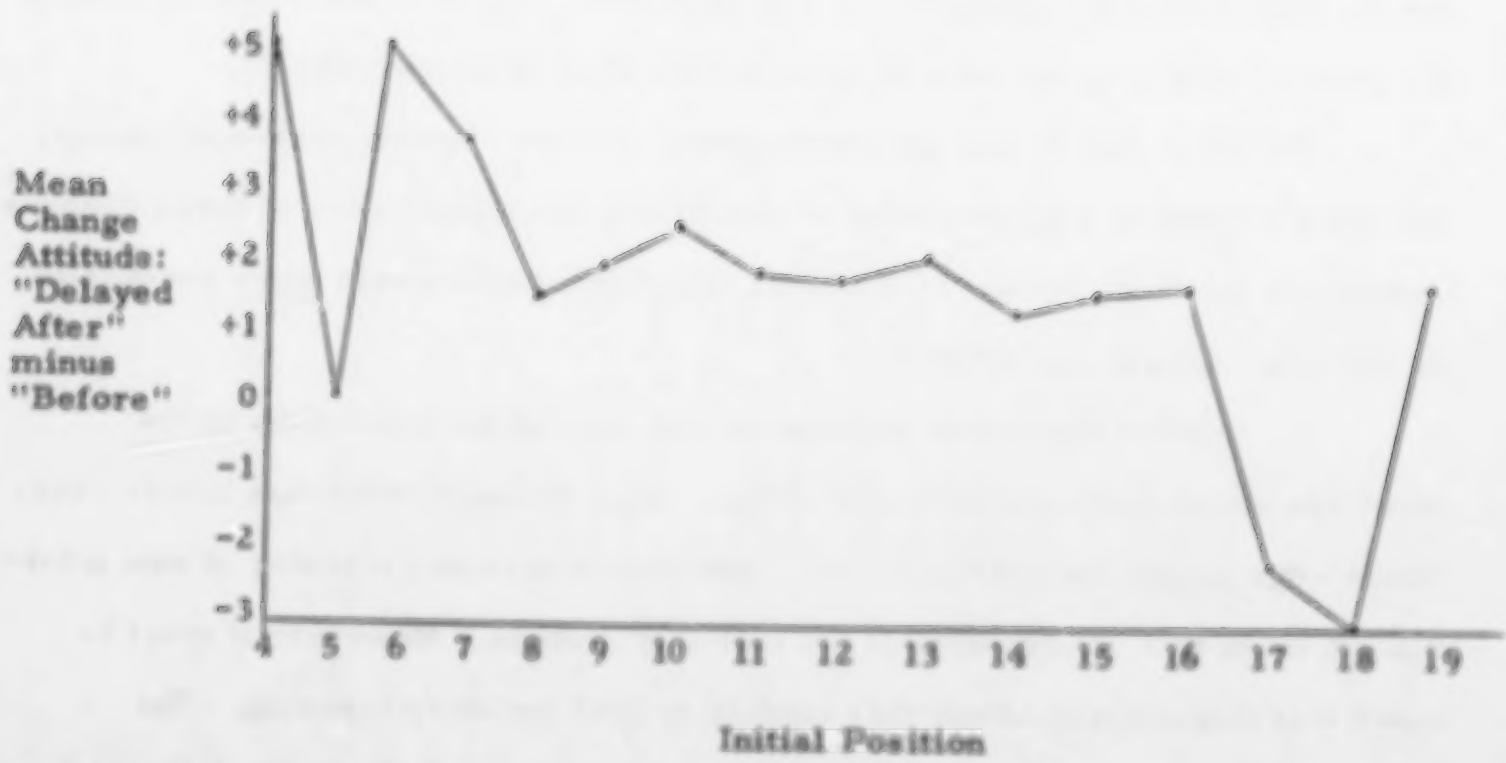

Figure VIII: Initial Position vs. Change-Attitude, "Before" to "Delayed After" (N = 96).

If not taken into account, these relationships, representing a considerable source of within-group variance, might mask changes attributable to the main experimental variables. Therefore, each subject's change score was transformed by taking it as a proportion of the total change possible, given its initial level. This was done for both positive and negative changes and it is these transformed scores that will be used henceforth. For example, if Subject X had an information score of 12 out of a possible 18 in the "before" test and gained three points in the "after" test, his gain of three was divided by six -- the amount he might have changed. In the analysis, Subject X had a score of +3/6 or +.50. In this way, all individuals are equated for initial position.

E. Overall Changes

The first major evaluative question to be answered is whether the films and records brought about significant changes in scores on the dependent variables, regardless of experimental manipulations. Table II and Table III report the gross changes on the nine dependent variables of major interest.

Tables II and III are complementary, the one showing degree of change, the other providing a quick means of identifying the significance of those changes. Judging by the final column of Table III, the films and records were successful in inducing changes, as follows:

1. Information levels increased, not only at the conclusion of the meetings but also after a period of delay. Thus it would seem that in this case, "knowledge begets knowledge," i.e., that exposure to and learning of new information leads to a continuation of the learning process. However, it must be noted that this delayed effect may merely reflect ordinary learning. The absence of a true control group prevents any positive conclusion on this point.

Table II: Average of Group Means and Mean Changes†

	Time					
	"Before" (N = 47)	"After" (N = 47)	"Delayed After" (N = 46)	"After" minus "Before" (N = 47)	"Delayed After" minus "Before" (N = 46)	"Delayed After" minus "After" (N = 46)
Information	11.09	12.86	12.93	+.23*	+.23*	+.07*
Information post only	///	5.81	5.69	///	///	-.05
Attitude	12.16	14.83	13.95	+.17*	+.11*	-.05*
Deafness Reality	2.46	2.24	2.42	-.21	-.18	+.09
Progressivism	4.31	4.15	4.00	-.16	-.31	-.17
Traditionalism	3.47	3.23	3.62	-.26	+.14	+.36
Educational valence	4.12	3.82	3.91	-.44	-.25	+.21
Time	2.36	2.40	2.31	+.10	-.08	-.24
Confidence	3.23	3.44	3.37	+.19	+.20	-.03

*Transformed scores.

†The discrepancies between differences among the first three columns and the differences tallied in the last three columns are due to unequal n's. The columns labelled "Before" and "After" report figures based on all returned questionnaires, regardless of whether or not subsequent questionnaires were returned.

Table III: Number of Groups with Positive and Negative Changes

	"After" minus "Before" (N-47)			"Delayed After" minus "Before" (N-46)			"Delayed After" minus "After" (N-46)			χ^2 Yields $P < .05$ for + vs. -
	+	0	-	+	0	-	+	0	-	
Information	47	0	0	44	0	2	33	2	11	A-B, DA-B, DA-A
Information post only							16	9	21	
Attitude	47	0	0	44	0	2	10	3	33	A-B, DA-B, DA-A
Deafness Reality	11	6	30	8	11	27	25	4	17	A-B, DA-B
Progressivism	16	6	25	16	2	28	13	11	22	
Traditionalism	14	1	32	22	6	18	33	1	12	A-B, DA-A
Educational Valence	13	3	31	19	1	26	29	4	13	A-B, DA-A
Time	26	6	15	19	4	23	15	3	28	
Confidence	36	7	4	30	8	8	14	14	18	A-B, DA-B

2. Attitudinal positions changed in the advocated directions, but by the time of the delayed-after questionnaire had retrogressed significantly. Thus it would seem that the desired effects initially registered were not clearly of a permanent nature, and would presumably benefit from periodic reinforcement.

3. The deafness reality index shows an initial change in the desired direction, i.e., subjects take a more realistic view of the handicaps represented by deafness, but this change tends to disappear after a period of time (a high score indicates an unrealistic attitude).

4. Progressivism decreased over time, but not significantly.

5. Traditionalism decreased initially, but later rebounded to a point beyond its original levels.

6. Educational valence decreased initially, but later returned to its original level.

7. Time commitment manifested no change of statistical significance. It should be noted that this variable was particularly open to other effects, since the end of the experiment coincided with the end of the school year, so that time available was not constant over the period of study.

8. Confidence significantly increased with no significant backsliding.

As is obvious from the above, the findings suggest a certain level of success, but changes generally did not hold over an extended period of time. In the one case in which changes were significant in the desired direction at each point of time – gains in information – the absolute levels of change were not large, amounting to less than two points. Unfortunately, the amount of change that could have taken place on this variable was restricted by relatively high initial levels of information. A less informed group of subjects would presumably manifest *greater information* gain.

As noted earlier, no true control group was possible in the present study, although four sets of controls were established consisting of individuals whose mean education and exposure scores were matched as nearly as possible with the experimental group means. In order to evaluate further the changes noted in the experimental groups, Tables IV and V present the pertinent comparisons for the information test and the attitude test, while Figures IX and X show the differences graphically.

Table IV: Experimental-Control Comparisons on Information Test Scores

Groups	Raw Scores			Transformed Change Scores		
	"Before"	"After"	"Delayed After"	"After" minus "Before"	"Delayed After" minus "Before"	"Delayed After" minus "After"
Experimental	11.09	12.86	12.93	+.23	+.23	+.07
Control A (N-19)	11.00	11.58	11.68	+.09	+.11	+.03
Control B* (N-21)	10.76	///	10.95	///	+.06	///
Control C (N-25)	///	11.64	11.36	///	///	+.01
Control D (N-34)	///	///	11.56	///	///	///

*Control B could not be properly matched on both exposure to materials and educational attainment.

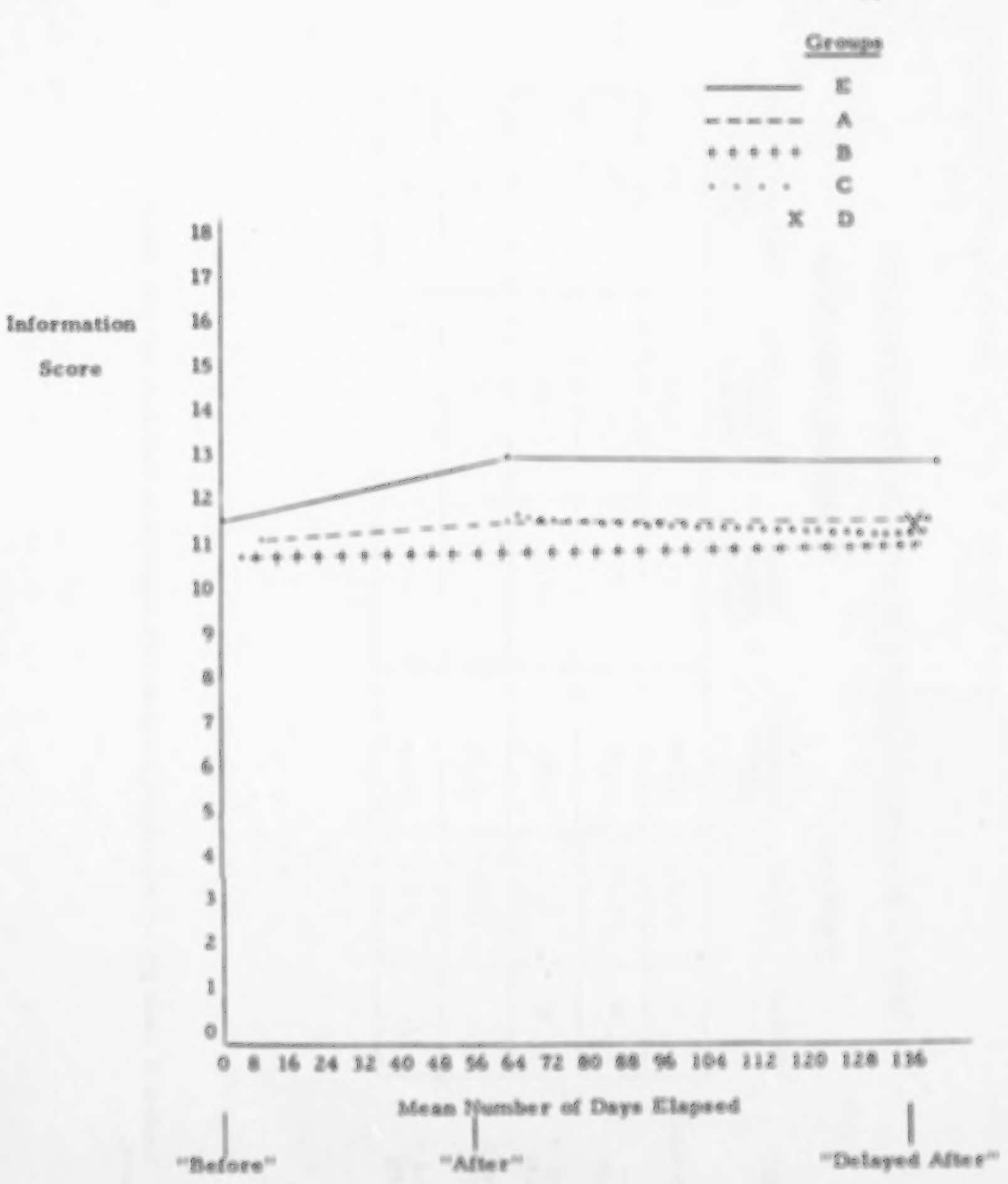

Figure IX: Experimental-Control Comparisons on Information Scores.

Table V: Experimental-Control Comparisons on Attitude Test Scores

Groups	Raw Scores			Transformed Change Scores		
	"Before"	"After"	"Delayed After"	"After" minus "Before"	"Delayed After" minus "Before"	"Delayed After" minus "After"
Experimental	12.16	14.83	13.95	+.17	+.11	-.05
Control A (N-19)	12.58	13.28	13.47	+.03	+.05	+.01
Control B* (N-21)	11.95	///	12.60	///	+.03	///
Control C (N-25)	///	12.88	12.72	///	///	-.02
Control D (N-34)	///	///	12.64	///	///	///

*Control B could not be properly matched on both exposure to materials and educational attainment.

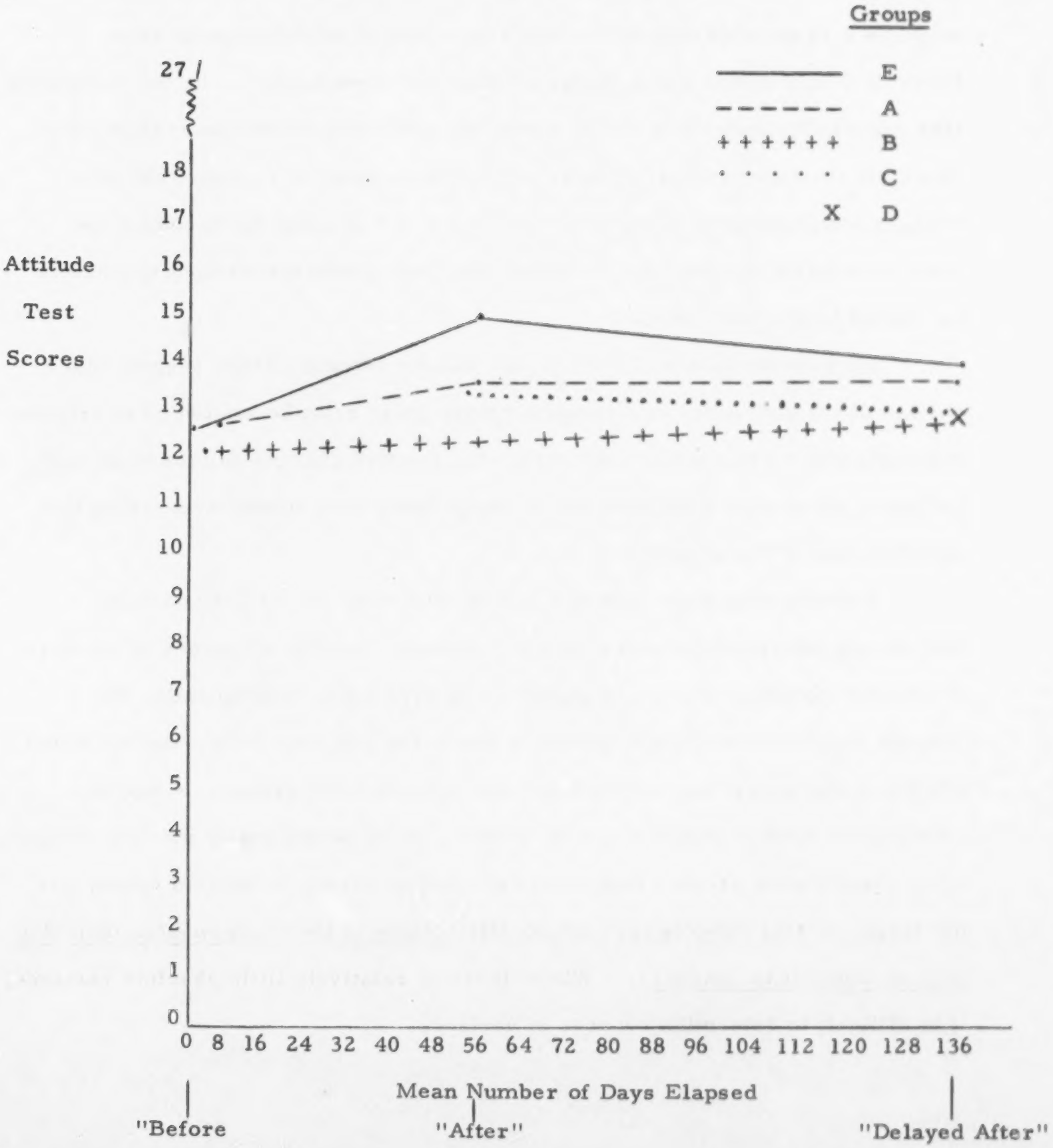

Figure X: Experimental-Control Comparisons on Attitude Test Scores.

Since the changes in the control groupsare consistently in a positive direction but not of the magnitude to be found in the experimental groups, it would be a reasonable conclusion that some natural positive change (see Controls C and D) and some change attributable to exposure to the test materials (see especially Controls A and B) should be taken into account in evaluating the change in the experimental groups. At the same time, it is clear that these changes attributable to extraneous factors are not so large as to change the basic conclusion that the films and records (plus group discussion) effectively increased information levels.

As with the data in Table IV, the data on attitude change suggest that a portion of the gain noted in the experimental group must be attributed to extraneous variables. The control subjects posted positive changes for the most part, but again not of such magnitude as to change basic conclusions concerning the effectiveness of the program.

Summarizing these findings briefly, the program was effective in introducing informational and attitudinal changes, but these changes in the case of several variables decreased significantly over time. Additionally, the changes registered were only partially due to the program itself, since a minor portion - the change was also manifested in the control groups. A major problem for further analysis is now evident: the experimentally induced changes, while significantly greater than to be expected by chance in several cases, are not large, so that differential changes attributable to the experimental variables may be difficult to "uncover." Where there is relatively little absolute variance, it is difficult to determine sources of variance.

F. Effects of Narration and Order of Presentation

The effects of the two main variables were tested by applying analysis of variance techniques to the scores on each dependent variable separately. This technique was first applied to the scores on the "Before" questionnaire. The only significant F was for the interaction effect of narration and order of presentation on the deafness reality index. With this the only comparison in eight F tables to reach significance, it was felt that the matching process by which groups were assigned to the eight experimental cells was successful. Initial differences were unimportant, and covariance techniques therefore unnecessary.

Analyses of variance were then applied to each variable on the "After" and "Delayed After" questionnaires, as well as to the three possible sets of change scores. Again, the results of these analyses were such that it is unnecessary to report on each analysis separately. Table VI summarizes the findings. The letters N.S.D. signify that F tests for the overall Between-groups, narration, order of presentation, and interaction sums of squares yield no significant differences (N.S.D.) at the .05 level. In other words, each cell in Table VI summarizes an entire analysis of variance, reporting any significant findings which occurred.

The significant interactions for the deafness reality index must be discarded as conceptually meaningless, since the effect was already apparent on the "Before" questionnaire, i.e., prior to the induction of the independent variables. The significant F for orders on the "Post-only" information test does not accord with prediction, for the lowest score is obtained in the 9A-9I condition, the condition in which the nine information films were presented last. Thus even a recency hypothesis – the expectation that subjects who saw

Table VI: Summary of Differences Attributable to Variations in Narration and Order of Presentation

Score Base

	"Before"	"After"	"Delayed After"	"After" minus "Before"	"Delayed After" minus "Before"	"Delayed After" minus "After"
Information	N.S.D.	N.S.D.	N.S.D.	N.S.D.	N.S.D.	N.S.D.
Information post only	///	orders $p < .05$	N.S.D.	///	///	N.S.D.
Deafness Reality	Interaction $p < .05$	Interaction $p < .05$	N.S.D.	N.S.D.	Interaction $p < .05$	N.S.D.
Progressivism	N.S.D.	N.S.D.	N.S.D.	N.S.D.	N.S.D.	N.S.D.
Traditionalism	N.S.D.	N.S.D.	N.S.D.	N.S.D.	N.S.D.	N.S.D.
Educational Valence	N.S.D.	N.S.D.	N.S.D.	N.S.D.	N.S.D.	N.S.D.
Time	N.S.D.	N.S.D.	N.S.D.	Narrators $p < .05$	N.S.D.	N.S.D.
Confidence	N.S.D.	N.S.D.	N.S.D.	Narrators $p < .01$	Narrators $p < .01$	N.S.D.

the information materials last would remember them more readily -- fails of confirmation. The three significant F's for variations in narration, occurring in change scores for time commitment and confidence levels, present the only consistent pattern. In each case, the Star condition was superior to the Expert condition.

In studying a set of findings such as those in Table VI, one must resist the temptation to reach for straws. The number of significant F's is so low that it can reasonably be attributed to pure chance factors. The only legitimate overall conclusion is that the variations in narration and order of presentation did not materially affect scores on the dependent variables.

G. Other Sources of Variance

Given the lack of significant differences attributable to the independent variables, the question may still be asked, what factors other than pure chance have contributed to the variance between group reactions to the experimental materials, regardless of experimental condition. We already know that one source of variance is the audio-visual materials themselves. Other possibilities which can be assessed are attendance, dogmatism, and selected background characteristics of the experimental subjects. In order to test these factors, their relationships to change in information levels and attitudinal positions were submitted to analysis, with the results summarized in Table VII.

Table VII provides a good deal of contrast to the findings with respect to narration and order of presentation. Attendance, as one might well imagine, is related to both information and attitude change well beyond the expectations of change. Dogmatism seems related to information gain (high dogmatics manifesting less information gain) but not to attitude change. The background

Table VII: Attendance, Dogmatism, and Background Factors as Related to Information and Attitude Change

Sources of Variance	Information Change* "After" minus "Before"	Information Change* "Delayed After" minus "Before"	Attitude Change* "After" minus "Before"	Attitude Change* "Delayed After" minus "Before"	Unit of Analysis
Attendance	$r = +.42$ $p < .01$	$r = +.17$ n.s.	$r = +.33$ $p < .05$	$r = +.35$ $p < .01$	Groups
Dogmatism	$r = -.12$ $p < .05$	$r = -.11$ $p < .06$	$r = -.05$ n.s.	$r = -.04$ n.s.	Individuals
Age of Subject	$r = +.04$ n.s.	$r = -.01$ n.s.	$r = -.04$ n.s.	$r = -.09$ n.s.	"
Exposure	$r = -.04$ n.s.	$r = -.08$ n.s.	$r = +.10$ $p < .06$	$r = +.13$ $p < .05$	"
Education Level	$\chi^2 = .51$ n.s.	$\chi^2 = 1.55$ n.s.	$\chi^2 = 5.82$ $p < .06$	$\chi^2 = 2.81$ n.s.	"
Perceived Deafness	$r = -.04$ n.s.	$r = -.06$ n.s.	$r = -.11$ $p < .06$	$r = -.11$ $p < .06$	"
Perceived Handicap	$r = +.04$ n.s.	$r = +.07$ n.s.	$r = -.01$ n.s.	$r = -.05$ n.s.	"

*Transformed scores.

characteristics seem consistently unrelated to information gain, but manifest considerable relationship to attitude change. The specific relationships here are not so important as is the general tenor of the findings to the effect that, as a sample of a population of individual characteristics, these variables are of far more value in predicting change than are the induced variables under consideration. Individual characteristics, attendance, and the audio-visual materials themselves were, in this study, the significant determinants of change.

IV. Discussion

Data have a way of speaking for themselves. In the present instance several broad conclusions have already been stated. It is clear that, as was expected to be the case, the audio-visual materials successfully increased information levels and effected some positive change in attitudinal positions, though in the case of the latter a certain amount of backsliding was evident. It is equally clear that the major independent variables, type of narration and order of presentation, did not differentially affect these changes. Selected background characteristics (as well as attendance) were significantly related to observed changes in the dependent variables.

The primary question to be answered at this point is why the independent variables failed to effect significantly different levels of change. The more obvious possibilities would seem to be the following:

A. The initial levels were already high, leaving little room for variance in change between experimental conditions. For example, the mean group information score on the "Before" test was 11.09 – almost 2/3 of the possible, and approximately double the chance level. These were not naive parents with respect to the variables being measured.

B. The subjects were a highly motivated group. Evidence exists in the psychological literature* that high motivational levels tend to mask other variables as determinants of learning.

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*As an example, see Maccoby, Nathan and Donald N. Michael, "Some Factors Influencing the Effects of Audience Participation on Learning from a Factual Film," HRRL, Bolling AFB, Washington, 1951.

C. The induction of the narration variable may not have been highly successful in spite of the precautions taken. One marked departure of the present study from others in which narration variations (or "communicator credibility") have been employed has to do with the connection between the narrator and the material narrated. In most studies, subjects are given to understand that the narrator was responsible for the material, i.e., he wrote it, or thought it out himself. In the present study, it must have been clear to the subjects that the narrators were not responsible for the materials, that they were merely reading scripts whose origin was obviously the professional staff of the John Tracy Clinic. Were the materials presented to the subjects not highly salient to them, this condition might not provide a very convincing argument. But because the materials were highly salient to a highly motivated group specifically seeking professional guidance, we are inclined to believe that the nature of the prestige of the voices on the films and records had little chance of differentially affecting change.

D. With respect to educational values, it must be remembered that the content of the Progressivisim, Traditionalism, and Educational Valence Scales was quite divorced from any direct, manifest relationship with the content of the information and attitude series. Thus the lack of any lasting change attributable to the films and records may well be simply a function of the divorce between the two sets of content.

E. Finally, the observers' reports make it abundantly clear that much of the group discussion that took place in each meeting was ill-focused on the relevance of the materials to the personal situations of the subjects. To the degree that these unguided discussions failed to optimize use of the materials presented, one can lower one's expectations for change, and therefore the opportunity for the independent variables to affect change differentially.

We conclude with what must by now be obvious suggestions for the future uses of these educational materials. First, they are of greatest use to parents with the least exposure to such materials in the past. Parents whose deaf children are five years of age or more often find the materials too elementary. Second, further group use of the materials should involve professional guidance. Teachers of the deaf, clinical psychologists, or even trained group leaders would add immeasurably to the learnings and positive changes to be derived from the materials. Third, and this is true especially of the attitudinal materials, reinforcement of changes over a considerable period of time would seem highly advisable. The evident "backsliding" of attitude scores and scores on the deafness reality index strongly supports this notion. Without follow-up, much initial gain may be lost.

APPENDICES

Appendix I

Narrators

A. Star Narrators: We are grateful to the following people for their participation:

Lew Ayres	Ida Lupino
Dr. Frank Baxter	James Mason
Lee J. Cobb	Raymond Massey
John Forsythe	Gregory Peck
James Garner	Dick Powell
Cary Grant	Edward G. Robinson
Lorne Greene	Spencer Tracy
Van Heflin	Claire Trevor
Charlton Heston	Robert Young

B. Expert Narrators: roles assumed by personnel of the University of Southern California and the John Tracy Clinic.

Name	Title	Affiliation
Dr. L. B. Carpenter	Family Consultant	California Department of Health and Welfare
Prof. Carl Cindsey	Associate Professor of Speech	Southwest College of Education
Prof. I. P. Edwards	Lecturer in Special Education	Olympia College
Prof. Lewis Harcourt	Lecturer	University of Los Angeles
Dr. R. Dixon Hill	Special Consultant	Department of Education
Dr. Bernadine Holt	Director	Seattle School for the Deaf
Dr. Everett W. Johnson	Chief Psychiatrist	Family Welfare Society

Name	Title	Affiliation
Prof. Abraham King	Associate Professor of Education	Olympia College
Dr. Wilson Mayer	Chief Therapist	Seattle School for the Deaf
Dr. Samuel B. McNemar	Hearing Consultant	Bakersfield Speech Clinic
Dr. Paul F. Morrow	Associate Director	Wilson Clinic
Dr. Joseph L. Murray	Clinical Psychologist	Wilson Clinic
Dr. Genevieve W. Rigney	Director	Family Welfare Society
Prof. Norton B. Sears	Director	Seattle School for the Deaf
Dr. Alexander Seeley	Otologist	San Francisco
Dr. C. David Smith	——	of the California Psychiatric Association
Prof. Gardner Walker	Linguist	University of Los Angeles
Dr. Herbert Wyman	Psychologist	Hearing Society of Northern California

Appendix II

Geographical Distribution of Experimental Groups

Appendix III

Time Schedule

Condition	Mailing Dates									
	3/22	3/30	4/6	4/13	4/19	4/27	5/4	5/11	5/18	5/23
S, 9A-9I	Intro.	A_1, A_2	A_3, A_4	A_5, A_6	A_7, A_8	A_9, I_1	I_2, I_3	I_4, I_5	I_6, I_7	I_8, I_9
S, 9I-9A	Intro.	I_1, I_2	I_3, I_4	I_5, I_6	I_7, I_8	I_9, A_1	A_2, A_3	A_4, A_5	A_6, A_7	A_8, A_9
S, 9(A-I)	Intro.	A_1, I_1	A_2, I_2	A_3, I_3	A_4, I_4	A_5, I_5	A_6, I_6	A_7, I_7	A_8, I_8	A_9, I_9
S, 9(I-A)	Intro.	I_1, A_1	I_2, A_2	I_3, A_3	I_4, A_4	I_5, A_5	I_6, A_6	I_7, A_7	I_8, A_8	I_9, A_9
E, 9A-9I	Intro.	A_1, A_2	A_3, A_4	A_5, A_6	A_7, A_8	A_9, I_1	I_2, I_3	I_4, I_5	I_6, I_7	I_8, I_9
E, 9I-9A	Intro.	I_1, I_2	I_3, I_4	I_5, I_6	I_7, I_8	I_9, A_1	A_2, A_3	A_4, A_5	A_6, A_7	A_8, A_9
E, 9(A-I)	Intro.	A_1, I_1	A_2, I_2	A_3, I_3	A_4, I_4	A_5, I_5	A_6, I_6	A_7, I_7	A_8, I_8	A_9, I_9
E, 9(I-A)	Intro.	I_1, A_1	I_2, A_2	I_3, A_3	I_4, A_4	I_5, A_5	I_6, A_6	I_7, A_7	I_8, A_8	I_9, A_9

Each package* contained two films, two records, instructions regarding narrator, order of presentation, meeting date, rewind, broken or scratched materials, return mail.

*Introduction has one film and record.

JOHN TRACY CLINIC
806 WEST ADAMS BLVD.
LOS ANGELES 7, CALIFORNIA

TO: ALL PARTICIPANTS IN THE FILM RESEARCH PROJECT

FROM: MALCOLM W. KLEIN

Before the program starts this winter, we need to get from each of you the information listed below. This information is needed in order to have some idea of the kinds of people we have in each group, and the amount and kind of experience each group has already had. As with all the information we ask of you, this material will be held in strictest confidence. Please answer <u>every</u> question as fully as you can (use the extra space if you wish to add something) and return this sheet in the enclosed, stamped envelope as soon as possible. We would like to have them all returned within a week. Thank you.

1. Name _____

2. Address _____

3. Name of your group's coordinator _____

4. Age _____

5. Age of deaf or hard-of-hearing child _____ (If more than one, please indicate.)

6. How far did you go in school (check one):

   a. ___ I left school <u>before</u> the 9th grade.
   b. ___ I left school before graduating from high school.
   c. ___ I graduated from high school.
   d. ___ I went on to college, business school, or technical school.

7. How would you describe your child's hearing handicap, in terms of his or her ability to manage the everyday matters of life? In other words, how much of a handicap do <u>you</u> feel your child has?

   a. ___ Extreme handicap
   b. ___ Moderate handicap
   c. ___ Only a slight handicap
   d. If these categories seem inappropriate in your case, please check the one which best fits your feeling, and then express it in your own words:

8. If you know it, please indicate the amount of loss in each ear and in both ears measured together.

   a. Right ear _____ db loss
   b. Left ear _____ db loss
   c. Both ears _____ db loss

9. Do you have any other deaf or hard-of-hearing children? _____
   Anyone else in your immediate family? _____

10. Would you describe your child as (check one):

   a. ___ Completely deaf
   b. ___ Almost completely deaf
   c. ___ Seriously hard of hearing
   d. ___ Moderately hard of hearing

11. One of the major problems in scheduling the program will be finding a night each week that is convenient for the largest number of people. Please indicate below the two nights you prefer. (Put a "1" next to the best night and a "2" next to the second-best night.)

   ___ Monday
   ___ Tuesday
   ___ Wednesday
   ___ Thursday
   ___ Friday
   ___ Saturday (Circle: a. Morning b. Afternoon c. Evening)
   ___ Sunday (Circle: a. Morning b. Afternoon c. Evening)

Since no two communities are exactly alike in the facilities they can offer, we would like you to answer each of the following questions, to give us an idea of the opportunities you have had to get information.

12. _____ Have you ever enrolled in a class for parents of deaf or hard-of-hearing children? If yes, how many classes have you attended? _____
    Where were they held? _____

    _____

13. _____ Have you ever taken part in other parent meetings, aside from formal classes, concerned with deafness? If so, who organized the meetings?

    _____

14. _____ Have you ever attended lectures or movies on deafness, education of deaf children, etc.? If so, where were these held?

    _____

15. _____ Has your child been in any sort of special class, playgroups, etc., for the deaf? If so, where were these held?

    _____

16. _____ Has your child had special lessons with a teacher or a tutor of the deaf? If so, about how many lessons has he had? _____

17. _____ Have you been enrolled in the John Tracy Clinic Correspondence Course? If so, how many lessons have you completed so far? _____

18. _____ Have you been able to do other things, not covered above, to acquaint yourself with the problems of deafness or of educating deaf children? If so, please describe what you have done very briefly:

Directions: The following 18 questions should be answered by circling the letter of the answer you believe is correct. Circle only one letter for each question. When you have answered these 18 items, please go back over them and put a checkmark (✓) next to the ones about which you feel confident – the ones you are sure you answered correctly.

1. The threshold of a tone is:

   a. The normal range of volume at which the tone can be heard.

   b. The greatest (loudest) sound your ear can tolerate of that tone.

   c. The least (the softest) sound you can hear of that tone.

   d. The volume beyond which the use of a hearing aid is recommended.

2. When your child has a temper tantrum, the best thing to do is to:

   a. Leave him alone until he quiets down.

   b. Try to explain to him that there is no reason for his anger.

   c. Stay with the child and be understanding.

   d. None of these.

3. As with a hearing child, you will be continually talking to your child before he realizes that your lip movements have any particular meaning. But when is a child actually ready to learn to lipread?

   a. When he gives quick glances at your lips.

   b. When he begins to deliberately watch the lips of talking people.

   c. When he has imitated a word you have said.

   d. None of these.

4. In the first stages of teaching your child the names of objects, a good technique is to use cartoon drawings, since these will usually increase the child's interest in the lessons.

   a. True

   b. False

5. Such things as gesturing while speaking will make the meaning of your words clearer and will keep your child attentive to your words.

   a. True

   b. False

6. The use of the child's hand to feel the sound is particularly helpful in teaching him a word he will use to express himself. How should the child place his hand on the other person's face?

   a. Finger on the speaker's lips, thumb on the speaker's chin as close to jawline as possible.

   b. Hand on the speaker's cheek, little finger along jawline, thumb in front of and slightly below the speaker's lips.

   c. Either of the above is all right.

   d. Neither of the above is correct.

7. In the beginning it is best for everyone in the family to use the same words for routine events, like mealtime and bedtime.

   a. True

   b. False

8. A word which means basically the same thing as "language" is:

   a. Speech

   b. Grammar

   c. Words

   d. None of these

9. The decibel is a measure of:

   a. Loudness

   b. Pitch

   c. Frequency

   d. Range

10. When you are talking about how a child's words sound to you (the quality of the sound, and how the child says his words) you are talking about:

    a. Speech

    b. Language

    c. Both of the above answers are correct.

11. One step in testing the child's understanding is to get him to bring the particular object when you ask him for it. In the beginning he will not know what you want him to do. The best thing for you to do is:

    a. Keep repeating the word until he gets the idea himself.

    b. Lead him to the object and help him pick it up and bring it back.

    c. Go yourself and bring back the object.

    d. Point to the object, or gesture.

12. Because most deaf children must rely on lipreading and touch, certain common phrases such as "Did you hear what I said," and "Did you hear that noise," should be changed to "Did you see what I said," and "Did you feel that noise."

    a. True

    b. False

13. When you are giving a child lipreading practice on a particular word, you should use the word in a number of different phrases or sentences, rather than using the same phrase each time.

    a. True

    b. False

14. Even if a child does not like to touch his mother's face when she is speaking, he should at times be required to do it, since it is very important in learning language.

    a. True

    b. False

15. In deciding on a time to give a child his daily lessons in lipreading, it is probably best to wait until he is ready each day, and not to set a regular time that will be the same each day.

    a. True

    b. False

16. Deafness is not simply a loss of volume; the range of frequencies that can be heard is also impaired. For most deaf children, the "lost" frequencies are those at:

    a. The higher end of the frequency range.

    b. The middle of the frequency range.

    c. The lower end of the frequency range.

    d. Both the higher and the lower ends of the frequency range.

17. Suppose you are practicing a specific lipreading word. Your child apparently does not understand what it is you just asked for. You repeat the word and still he does nothing. You should:

    a. Repeat the word a few more times.

    b. Guide his hand in doing what you asked for.

    c. Do it yourself.

    d. None of these.

18. Final evidence – that is, proof positive – that a child can lipread a particular word comes only when he has learned more than one word and he can pick out that object, when you ask for it, from among others for which he knows the words.

    a. True

    b. False

NOW PLEASE GO BACK OVER THESE 18 QUESTIONS AND PLACE A CHECK-MARK NEXT TO THE ONES ON WHICH YOU ARE SURE YOU SELECTED THE CORRECT ANSWER. AFTER YOU HAVE DONE THAT, GO ON TO THE NEXT PAGE.

Directions: The following 9 questions should be answered by circling the letter of the answer you believe is correct. Circle only one letter for each question.

1. The organ of Corti is like a miniature harp, except that it is much more complex than a harp. Having been transferred to the organ of Corti, the sound vibration will next be passed through:

   a. The cochlea

   b. The brain

   c. The auditory bones (hammer, anvil, and stirrup)

   d. The auditory nerve

2. A person may be said to have two vocabularies. They are called:

   a. Retentive and receptive

   b. Expressive and repressive

   c. Expressive and receptive

   d. Retentive and repressive

3. In choosing a word to be used in specific lip-reading, which one of the factors listed below is not of major importance?

   a. Usefulness of the word

   b. The number of syllables in the word

   c. The child's interest in the object

   d. Amount of opportunity for experience with the object

   e. The visibility of the word

4. The following are statements about specific auditory training. Circle the one that is true.

   a. It is helpful only if the child has a hearing aid.

   b. It may in time change whatever it is that is causing the child's deafness.

   c. It should be thought of as a test of the child's hearing ability.

   d. It should be done for only short periods at a time.

5. A noun usually makes the best word to single out for specific lipreading practice.

   a. True

   b. False

6. Although there may be some exceptions, it is usually best to choose the first word for specific expressive language practice from among those you have been using for specific lipreading practice.

   a. True

   b. False

7. In order to keep a child from thinking of his lesson materials as just work materials, he should be allowed to play with them right along with his toys.

   a. True

   b. False

8. When you are working on the two-word contrast, although you should vary the materials used in the game (for example, use the real object sometimes and pictures other times), in the beginning you should always use the same kind of game.

   a. True

   b. False

9. Touch should be used almost constantly during each language-learning lesson.

   a. True

   b. False

Instructions: Please circle the answer that seems closest to being your opinion.

1. When a young child is experimenting with new materials like paint or clay, his parents should let him do as he wishes with it and not restrict him in any way.

AGREE STRONGLY | TEND TO AGREE | NO OPINION | TEND TO DISAGREE | DISAGREE STRONGLY

2. With the exception of their physical hearing loss, deaf children are in no way different from hearing children.

AGREE STRONGLY | TEND TO AGREE | NO OPINION | TEND TO DISAGREE | DISAGREF STRONGLY

3. Growing up to be mature persons amounts pretty much to learning to accept the rules and patterns that are given to the person by his parents.

AGREE STRONGLY | TEND TO AGREE | NO OPINION | TEND TO DISAGREE | DISAGREE STRONGLY

4. When one has serious personal problems to solve which involve other members of the family, it's usually better to think them through completely before openly discussing them.

AGREE STRONGLY | TEND TO AGREE | NO OPINION | TEND TO DISAGREE | DISAGREE STRONGLY

5. Discipline and punishment should mean about the same thing.

AGREE STRONGLY | TEND TO AGREE | NO OPINION | TEND TO DISAGREE | DISAGREE STRONGLY

6. If parents use intelligence and understanding, they will generally find that raising a child with a hearing loss is really no more of a burden than raising a hearing child.

AGREE STRONLY | TEND TO AGREE | NO OPINION | TEND TO DISAGREE | DISAGREE STRONGLY

7. Even when a young child has learned to use paints, crayons, and tools, his parents should not teach im what to make with these things.

AGREE STRONGLY | TEND TO AGREE | NO OPINION | TEND TO DISAGREE | DISAGREE STRONGLY

8. A person who really dislikes seeing anger in other people is probably unable to handle his own anger very well.

AGREE STRONGLY	TEND TO AGREE	NO OPINION	TEND TO DISAGREE	DISAGREE STRONGLY

9. Personal problems should be thought out carefully before being talked out within the family.

AGREE STRONGLY	TEND TO AGREE	NO OPINION	TEND TO DISAGREE	DISAGREE STRONGLY

10. <u>All</u> learning in pre-school children is a kind of trial-and-error process, in which the child must experiment and try out new things and ideas in order to understand them.

AGREE STRONGLY	TEND TO AGREE	NO OPINION	TEND TO DISAGREE	DISAGREE STRONGLY

11. If a child starts to regress a little – that is, if he starts to act younger than he has been acting – it's a sure sign that he has stopped developing in a normal and natural way.

AGREE STRONGLY	TEND TO AGREE	NO OPINION	TEND TO DISAGREE	DISAGREE STRONGLY

12. No matter how hard we try, it is impossible to hide our feelings from our children.

AGREE STRONGLY	TEND TO AGREE	NO OPINION	TEND TO DISAGREE	DISAGREE STRONGLY

13. Some people are mostly interested in their children for what they <u>are</u>, and some for what they <u>might become</u>. Generally speaking, it's better for the child's own future if his parents stress what he <u>is</u> rather than what he might become.

AGREE STRONGLY	TEND TO AGREE	NO OPINION	TEND TO DISAGREE	DISAGREE STRONGLY

14. When considering the future occupation of a deaf child, one has to be more careful and selective than with a hearing child.

AGREE STRONGLY	TEND TO AGREE	NO OPINION	TEND TO DISAGREE	DISAGREE STRONGLY

15. A child should not be given things like scissors and hammers to play with until he's old enough to use them properly without supervision.

AGREE STRONGLY	TEND TO AGREE	NO OPINION	TEND TO DISAGREE	DISAGREE STRONGLY

16. Sometimes children's fears are based on real dangers, and we have to be ready to deal with these. However, some fears are purely imaginary, and all we need to do is make the child understand that there is really nothing to be afraid of.

AGREE STRONGLY	TEND TO AGREE	NO OPINION	TEND TO DISAGREE	DISAGREE STRONGLY

17. If a couple find that they have to work at making their marriage a happy one – if marital happiness does not come easily and naturally – then something is fundamentally wrong with their relationship.

AGREE STRONGLY	TEND TO AGREE	NO OPINION	TEND TO DISAGREE	DISAGREE STRONGLY

18. In establishing sound relationships with other people, one's feelings are more "important" than one's actual behavior.

AGREE STRONGLY	TEND TO AGREE	NO OPINION	TEND TO DISAGREE	DISAGREE STRONGLY

19. The presence of a deaf child in the family can be expected to increase tensions and problems already observable in any other children in the family.

AGREE STRONGLY	TEND TO AGREE	NO OPINION	TEND TO DISAGREE	DISAGREE STRONGLY

20. Failure is as good a teacher as success, since each one shows us what to do next time.

AGREE STRONGLY	TEND TO AGREE	NO OPINION	TEND TO DISAGREE	DISAGREE STRONGLY

21. Sometimes it's a very good idea for parents to do things for children, even though the children are perfectly capable of doing it themselves.

AGREE STRONGLY	TEND TO AGREE	NO OPINION	TEND TO DISAGREE	DISAGREE STRONGLY

22. Deafness will really have no effect on a child's relationships with hearing children of his own age.

AGREE STRONGLY	TEND TO AGREE	NO OPINION	TEND TO DISAGREE	DISAGREE STRONGLY

23. A parent who gives a great deal of attention to a child is obviously a parent who really loves the child in the fullest sense. In other words, the more love you have, the more attention you give.

AGREE STRONGLY	TEND TO AGREE	NO OPINION	TEND TO DISAGREE	DISAGREE STRONGLY

24. The system of giving children complete freedom to choose their own careers leads to a lot of unnecessary confusion in the growing child's mind.

AGREE STRONGLY	TEND TO AGREE	NO OPINION	TEND TO DISAGREE	DISAGREE STRONGLY

25. When a person feels really angry, the best thing to do is act this anger out – get it out of him – even if this means acting destructively at times. Otherwise the feeling will just build up inside him and get even more out of hand.

AGREE STRONGLY	TEND TO AGREE	NO OPINION	TEND TO DISAGREE	DISAGREE STRONGLY

26. From time to time a child must learn to obey for the sake of obeying; that is, we must teach our children to accept our authority and discipline without questioning the reasons.

AGREE STRONGLY	TEND TO AGREE	NO OPINION	TEND TO DISAGREE	DISAGREE STRONGLY

27. Great concern with our children's future is probably brought about by inadequacies or faults in ourselves.

AGREE STRONGLY	TEND TO AGREE	NO OPINION	TEND TO DISAGREE	DISAGREE STRONGLY

28. It's probably better to express most of our negative feelings out loud.

AGREE STRONGLY	TEND TO AGREE	NO OPINION	TEND TO DISAGREE	DISAGREE STRONGLY

29. No matter how good is his training or how healthy are his relationships with family and friends, a child's hearing loss is a handicap to his development and future.

AGREE STRONGLY	TEND TO AGREE	NO OPINION	TEND TO DISAGREE	DISAGREE STRONGLY

30. The tools a child uses should not be the good tools of the household, since young children have a tendency to misuse and break the things they use.

AGREE STRONGLY	TEND TO AGREE	NO OPINION	TEND TO DISAGREE	DISAGREE STRONGLY

31. Even in the most warm, loving, and accepting families, spanking is a harmful method of discipline.

AGREE STRONGLY	TEND TO AGREE	NO OPINION	TEND TO DISAGREE	DISAGREE STRONGLY

32. People can control their actions, but they cannot control their inner feelings.

AGREE STRONGLY	TEND TO AGREE	NO OPINION	TEND TO DISAGREE	DISAGREE STRONGLY

Instructions: The best answer to each statement below is your personal opinion. We have tried to cover many different and opposing points of view; you may find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others, and perhaps uncertain about others; whether you agree or disagree with any statement, you can be sure that many people feel the same as you do.

Mark each statement in the left margin according to how much you agree or disagree with it. Please mark every one. Write +1, +2, +3, or -1, -2, -3, depending on how you feel in each case.

+1: I AGREE A LITTLE	-1: I DISAGREE A LITTLE
+2: I AGREE ON THE WHOLE	-2: I DISAGREE ON THE WHOLE
+3: I AGREE VERY MUCH	-3: I DISAGREE VERY MUCH

___ 1. The United States and Russia have just about nothing in common.

___ 2. The highest form of government is a democracy and the highest form of democracy is a government run by those who are most intelligent.

___ 3. Even though freedom of speech for all groups is a worthwhile goal, it is unfortunately necessary to restrict the freedom of certain political groups.

___ 4. It is only natural that a person would have a much better acquaintance with ideas he believes in than with ideas he opposes.

___ 5. Man on his own is a helpless and miserable creature.

___ 6. Fundamentally, the world we live in is a pretty lonesome place.

___ 7. Most people just don't give a "damn" for others.

___ 8. I'd like it if I could find someone who would tell me how to solve my personal problems.

___ 9. It is only natural for a person to be rather fearful of the future.

___ 10. There is so much to be done and so little time to do it in.

___ 11. Once I get wound up in a heated discussion I just can't stop.

___ 12. In a discussion I often find it necessary to repeat myself several times to make sure I am being understood.

___ 13. In a heated discussion I generally become so absorbed in what I am going to say that I forget to listen to what the others are saying.

___ 14. It is better to be a dead hero than to be a live coward.

___ 15. While I don't like to admit this even to myself, my secret ambition is to become a great man, like Einstein, or Beethoven, or Shakespeare.

___ 16. The main thing in life is for a person to want to do something important.

___ 17. If given the chance I would do something of great benefit to the world.

___ 18. In the history of mankind there have probably been just a handful of really great thinkers.

___ 19. There are a number of people I have come to hate because of the things they stand for.

___ 20. A man who does not believe in some great cause has not really lived.

___ 21. It is only when a person devotes himself to an ideal or cause that life becomes meaningful.

___ 22. Of all the different philosophies which exist in this world there is probably only one which is correct.

___ 23. A person who gets enthusiastic about too many causes is likely to be a pretty "wishy-washy" sort of person.

___ 24. To compromise with our political opponents is dangerous because it usually leads to the betrayal of our own side.

___ 25. When it comes to differences of opinion in religion we must be careful not to compromise with those who believe differently from the way we do.

___ 26. In times like these, a person must be pretty selfish if he considers primarily his own happiness.

___ 27. The worst crime a person could commit is to attack publicly the people who believe in the same thing he does.

___ 28. In times like these it is often necessary to be more on guard against ideas put out by people or groups in one's own camp than by those in the opposing camp.

___ 29. A group which tolerates too much difference of opinion among its own members cannot exist for long.

___ 30. There are two kinds of people in this world: those who are for the truth and those who are against the truth.

___ 31. My blood boils whenever a person stubbornly refuses to admit when he's wrong.

___ 32. A person who thinks primarily of his own happiness is beneath contempt.

___ 33. Most of the ideas which get printed nowadays aren't worth the paper they are printed on.

___ 34. In this complicated world of ours the only way we can know what's going on is to rely on leaders or experts who can be trusted.

___ 35. It is often desirable to reserve judgment about what's going on until one has had a chance to hear the opinions of those one respects.

___ 36. In the long run the best way to live is to pick friends and associates whose tastes and beliefs are the same as one's own.

___ 37. The present is all too often full of unhappiness. It is only the future that counts.

___ 38. If a man is to accomplish his mission in life it is sometimes necessary to gamble "all or nothing at all."

___ 39. Unfortunately, a good many people with whom I have discussed important social and moral problems don't really understand what's going on.

___ 40. Most people just don't know what's good for them.

Instructions: Circle the answer that comes closest to your opinion.

1. Considering all the things that might bring about permanent peace in the world, education is the only really important one.

AGREE STRONGLY	TEND TO AGREE	TEND TO DISAGREE	DISAGREE STRONGLY

2. If it comes again to the point where we have to raise taxes a great deal more or cut school services just a little, we should cut down on a few school services.

AGREE STRONGLY	TEND TO AGREE	TEND TO DISAGREE	DISAGREE STRONGLY

3. Of all the things a person may have – money, background, intelligence, ambition, good character, etc. – a good education will help him most to lead the kind of life he wants.

AGREE STRONGLY	TEND TO AGREE	TEND TO DISAGREE	DISAGREE STRONGLY

4. People who prefer the traditional methods of education just don't understand the needs of modern life.

AGREE STRONGLY	TEND TO AGREE	TEND TO DISAGREE	DISAGREE STRONGLY

5. The best single way to judge the quality of a school is to see if the students are happy there.

AGREE STRONGLY	TEND TO AGREE	TEND TO DISAGREE	DISAGREE STRONGLY

6. The failure to stress athletics in the school program often prevents full growth and maturity.

AGREE STRONGLY	TEND TO AGREE	TEND TO DISAGREE	DISAGREE STRONGLY

7. Most schools would do much better if they hired many more special tutors and remedial teachers.

AGREE STRONGLY	TEND TO AGREE	TEND TO DISAGREE	DISAGREE STRONGLY

8. Teachers should be encouraged to speak out strongly about controversial issues more than they do now.

AGREE STRONGLY	TEND TO AGREE	TEND TO DISAGREE	DISAGREE STRONGLY

1. One of the failings of some schools is that they don't teach patriotism and love of one's country enough.

AGREE STRONGLY	TEND TO AGREE	TEND TO DISAGREE	DISAGREE STRONGLY

2. Changes in school policies should always be submitted to the voters in the community for their approval.

AGREE STRONGLY	TEND TO AGREE	TEND TO DISAGREE	DISAGREE STRONGLY

3. Our schools are not doing a good job of teaching basic skills.

AGREE STRONGLY	TEND TO AGREE	TEND TO DISAGREE	DISAGREE STRONGLY

4. The schools should concentrate primarily on just plain teaching, and leave other matters to the home and church.

AGREE STRONGLY	TEND TO AGREE	TEND TO DISAGREE	DISAGREE STRONGLY

5. Teachers ought to be given the right to discipline strongly any child who misbehaves in school, no matter what the offense is.

AGREE STRONGLY	TEND TO AGREE	TEND TO DISAGREE	DISAGREE STRONGLY

6. No matter how modern our schools are, most of the students they turn out are totally unprepared for real life.

AGREE STRONGLY	TEND TO AGREE	TEND TO DISAGREE	DISAGREE STRONGLY

7. One of the troubles with modern education is that it spends too much time dealing with the psychological state of the student.

AGREE STRONGLY	TEND TO AGREE	TEND TO DISAGREE	DISAGREE STRONGLY

8. Schools must concentrate their energies primarily on developing real obedience and respect for authority.

AGREE STRONGLY	TEND TO AGREE	TEND TO DISAGREE	DISAGREE STRONGLY

9. It would be better not to let people with unorthodox views speak to school children.

AGREE STRONGLY	TEND TO AGREE	TEND TO DISAGREE	DISAGREE STRONGLY

1. Regular after-school classes in music, art, and foreign languages should be strongly encouraged for all children, regardless of their talents.

AGREE STRONGLY | TEND TO AGREE | TEND TO DISAGREE | DISAGREE STRONGLY

2. Much progress has recently been made in raising the living standards of teachers. Even so, they should be given many more benefits, such as shorter hours, better salaries, pension plans, etc., even though our tax burdens would have to be increased a great deal to do this.

AGREE STRONGLY | TEND TO AGREE | TEND TO DISAGREE | DISAGREE STRONGLY

3. We should be spending twice as much money on education as we are now.

AGREE STRONGLY | TEND TO AGREE | TEND TO DISAGREE | DISAGREE STRONGLY

4. The federal government has an obligation to take a much bigger hand in supporting public education financially.

AGREE STRONGLY | TEND TO AGREE | TEND TO DISAGREE | DISAGREE STRONGLY

5. Unless educational planners take drastic action, factors like the teacher shortage and population explosion will turn our schools into third class institutions.

AGREE STRONGLY | TEND TO AGREE | TEND TO DISAGREE | DISAGREE STRONGLY

6. School vacations, especially in the summer, are much longer than they should be for the benefit of the pupil.

AGREE STRONGLY | TEND TO AGREE | TEND TO DISAGREE | DISAGREE STRONGLY

7. Adult education ought to be greatly expanded, even if it costs the taxpayers more money.

AGREE STRONGLY | TEND TO AGREE | TEND TO DISAGREE | DISAGREE STRONGLY

8. Among concepts such as character, education, moral strength, generosity, responsibility, and common sense, education is the noblest of all.

AGREE STRONGLY | TEND TO AGREE | TEND TO DISAGREE | DISAGREE STRONGLY

THE FOLLOWING INFORMATION IS NEEDED IN ORDER TO HELP US EVALUATE THE RESULTS OF THE QUESTIONNAIRE. PLEASE ANSWER <u>EVERY</u> ITEM.

1. Name _____

2. Name of Group Coordinator _____

3. How many children do you have altogether? _____

4. About how much time during the past seven days have you personally spent teaching your deaf child to lipread, to speak, and so on (this includes formal lessons as well as informal practice).

   a. More than 15 hours

   b. More than 10 but less than 15 hours

   c. More than 5 but less than 10 hours

   d. More than 2 but less than 5 hours

   e. Some time, but less than 2 hours

   f. No time (because the child is too young, or I have been away, or the child has not been home, or my husband or wife has done this, or there has been sickness in the family, or I have been too busy this past week, etc.).

5. Right now, how confident do you feel about your own ability to raise a deaf child to lead a happy, productive life on his own?

   a. I am very confident I can do this.

   b. I am fairly confident I can do this.

   c. I am not very confident about it right now.

   d. I honestly feel that I won't be able to do this.